

Db 2794 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 2853

RESULT 7

AY510107

LOCUS AY510107 824 bp mRNA linear PRI 03-FEB-2004

DEFINITION Homo sapiens 9F11 monoclonal IgM antibody light chain mRNA, complete cds.

ACCESSION AY510107

VERSION AY510107.1 GI:41388185

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 824)

AUTHORS Asai,S., Okada,N., Okada,H., Dohi,N. and Hosokawa,M.

TITLE Human IgM monoclonal Ab which induces complement mediated cytolysis of HIV-1 infected cells

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 824)

AUTHORS Asai,S., Okada,N., Okada,H., Dohi,N. and Hosokawa,M.

TITLE Direct Submission

JOURNAL Submitted (22-DEC-2003) Biodefense, Nagoya City University Graduate School of Medical Sciences, 1 Kawasumi Mizuho-cho Mizuho-ku, Nagoya, Aichi 467-8601, Japan

FEATURES Location/Qualifiers

source 1. .824

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/cell_line="9F11"

CDS 13. .723

/codon_start=1

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EDFATYYCQQANSFPLTFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNN
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THQGLSSPVTKSFNRGEC"

ORIGIN

Query Match 89.0%; Score 373.8; DB 9; Length 824;

Best Local Similarity 94.6%; Pred. No. 1.1e-113;

Matches 387; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
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Db 18 CATGAGGGTCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG 77

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCGCATCTGTAGGAGACAGAGTCAC 131
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Db 78 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCGCATCTGTAGGAGACAGAGTCAC 137

Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	138	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC	197
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	198	AGGGAAAGCCCCTAAGCTCTGATCTATGATGCATCCAGTTGCAAAGTGGGTCCCATC	257
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	258	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	317
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	318	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCTCTACTTGGCGG	377
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	378	AGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	426

RESULT 8

BC073764

LOCUS BC073764 936 bp mRNA linear PRI 30-JUN-2004
 DEFINITION Homo sapiens cDNA clone MGC:88771 IMAGE:4576136, complete cds.
 ACCESSION BC073764
 VERSION BC073764.1 GI:49256424
 KEYWORDS MGC.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 936)
 AUTHORS Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
 Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
 Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
 Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
 Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
 Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
 Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
 Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
 Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
 McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
 Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
 Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
 Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
 Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
 Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
 Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
 Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
 Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
 TITLE Generation and initial analysis of more than 15,000 full-length
 human and mouse cDNA sequences
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
 PUBMED 12477932
 REFERENCE 2 (bases 1 to 936)
 AUTHORS Strausberg, R.

TITLE Direct Submission
JOURNAL Submitted (23-JUN-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA
REMARK NIH-MGC Project URL: <http://mgc.nci.nih.gov>
COMMENT Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis Staudt
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: <http://www-shgc.stanford.edu>
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriguez, A., and Myers, R. M.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAL Plate: 58 Row: c Column: 10
This clone was selected for full length sequencing because it passed the following selection criteria: GenomeScan gene prediction, Similarity but not identity to protein.

FEATURES Location/Qualifiers
source 1. .936
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:88771 IMAGE:4576136"
/tissue_type="Primary B-Cells from Tonsils"
/clone_lib="NIH_MGC_48"
/lab_host="DH10B-R"
/note="Vector: pOTB7"
CDS 12. .722
/codon_start=1
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EDFATYYCQQAHSFPFTFGPGTKVDIKRTVAAPSVFIFPPSDEQLKSGTASVVCLNN
FYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSTTLSKADYEKHKVYACEV
THQGLSSPVTKSFNRGEC"

ORIGIN

Query Match 89.0%; Score 373.8; DB 9; Length 936;
Best Local Similarity 94.6%; Pred. No. 1.1e-113;
Matches 387; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAGATG 71
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 17 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCAGGTTCCAGATG 76
Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 131
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Db 77 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 136

Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	137	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC	196
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	197	AGGGAAAGCCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	256
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	257	AAGGTTCAGCGGCAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	316
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGTGTCTTC	371
Db	317	TGAAGATTTGCAACTTACTATTGTCAACAGGCTCACAGTTCCATTCACTTCGGCCC	376
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	377	TGGGACCAAAAGTGGATATCAAACGAACGTGGCTGCACCATCTGTCTTC	425

RESULT 9

AX305000

LOCUS AX305000 974 bp DNA linear PAT 11-DEC-2001

DEFINITION Sequence 29 from Patent EP1158004.

ACCESSION AX305000

VERSION AX305000.1 GI:17644678

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Takashi, T., Katsunari, T.P. and Nobuaki, H.

TITLE Human monoclonal antibody against a costimulatory signal transduction molecule ailim and pharmaceutical use thereof

JOURNAL Patent: EP 1158004-A 29 28-NOV-2001; Japan Tobacco Inc. (JP)

FEATURES Location/Qualifiers

source 1. .974

/organism="Homo sapiens"

/mol_type="unassigned DNA"

/db_xref="taxon:9606"

5 'UTR 1. .38

CDS 39. .749

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/db_xref="GI:17644679"

/translation="MDMRVPAQLLGLLLWFPGSRCEDIQMTQSPSSVSASVGDRVITITCRASQGISRLLAWYQQKPGKAPKLLIYVASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQANSFPWTFGQGKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSTTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC"

sig_peptide 39. .104

3 'UTR 750. .974

ORIGIN

Query Match 88.2%; Score 370.6; DB 6; Length 974;
Best Local Similarity 94.1%; Pred. No. 1.3e-112;
Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 44 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG 103
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Qy 72 CGACATCCAGATGACCCAGTCTCCATCTCCGTGCTGCATCTGTAGGAGACAGAGTCAC 131
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Db 104 CGACATCCAGATGACCCAGTCTCCATCTCCGTGCTGCATCTGTAGGAGACAGAGTCAC 163
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Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
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Db 164 CATCACTTGTGGCGAGTCAGGATATTAGCAGGTTAGCAGCTGGTATCAGCAGAAACC 223
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Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
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Db 224 AGGGAAAGCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 283
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Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
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Db 284 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 343
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Qy 312 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTACACTTTGGTCA 371
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Db 344 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTGGACGTTGGCCA 403
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Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
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Db 404 AGGGACCAAGGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC 452
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RESULT 10

AX306529

LOCUS AX306529 974 bp DNA linear PAT 11-DEC-2001

DEFINITION Sequence 29 from Patent WO0187981.

ACCESSION AX306529

VERSION AX306529.1 GI:17645749

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Tsuji,T., Tezuka,K. and Hori,N.

TITLE Human monoclonal antibody against a costimulatory signal
transduction molecule and pharmaceutical use thereof

JOURNAL Patent: WO 0187981-A 29 22-NOV-2001;
Japan Tobacco Inc. (JP)

FEATURES Location/Qualifiers

source 1. .974
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

5' UTR 1. . 38
 CDS 39. . 749
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 /codon_start=1
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 /translation="MDMRVPAQLLGLLLWFPGSRCIDIQMTQSPSSVSASVGDRVTIT
 CRASQGISRLLAQYQQKPGKAPLILYVASSLQSGVPSRFSGSGSGTDFTLTISSLQP
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 . sig_peptide 39. . 104
 3' UTR 750. . 974

ORIGIN

Query Match 88.2%; Score 370.6; DB 6; Length 974;
 Best Local Similarity 94.1%; Pred. No. 1.3e-112;
 Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCAGGTTCCAGATG	71
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Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	131
Db	104	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	163
Qy	132	CATCACTTGTGGGGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	164	CATCACTTGTGGGGAGTCAGGGTATTAGCAGGTTAGCAGGTTAGCCTGGTATCAGCAGAAAC	223
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	224	AGGGAAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC	283
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	284	AAGGTTCAGCGGCAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	343
Qy	312	TGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	344	TGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTGGACGTTGGCCA	403
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACCTGTGGCTGCACCATCTGTCTTC	420
Db	404	AGGGACCAAGGTGGAAATCAAACGAACCTGTGGCTGCACCATCTGTCTTC	452

RESULT 11

BD131246

LOCUS BD131246 974 bp DNA linear PAT 18-SEP-2002
 DEFINITION Human monoclonal antibody against constimulation transducer
 molecule AILIM and medicinal utilization thereof.
 ACCESSION BD131246
 VERSION BD131246.1 GI:23226191
 KEYWORDS JP 2002034581-A/28.
 SOURCE Homo sapiens (human)

ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 974)
 AUTHORS Tsuji,T., Tezuka,K. and Hori,N.
 TITLE Human monoclonal antibody against constimulation transducer
 molecule AILIM and medicinal utilization thereof
 JOURNAL Patent: JP 2002034581-A 28 05-FEB-2002;
 JAPAN TOBACCO INC
 COMMENT OS Homo sapiens (human)
 PN JP 2002034581-A/28
 PD 05-FEB-2002
 PF 30-MAR-2001 JP 2001099508
 PI TAKASHI TSUJI, KATSUNARI TEZUKA, NOBUAKI HORI
 PC C12N15/09, A61K31/7088, A61K38/00, A61K39/395, A61K39/395, A61K45/
 PC 00, A61P37/08,
 PC A61P43/00, A61P43/00, C07K16/28, C07K16/46, C07K19/00, C12N5/10, PC
 C12N15/02,
 PC
 C12P21/08, G01N33/15, G01N33/50, G01N33/53, G01N33/566, G01N33/577// PC
 (C12P21/08, C12R1:91), C12N15/00, A61K37/02, C12N5/00, C12N15/00 CC
 Human monoclonal antibody against constimulation transducer CC
 molecule AILIM
 CC and medicinal utilization thereof
 FH Key Location/Qualifiers
 FT 5'UTR (1) .. (38)
 FT CDS (39) .. (749)
 FT 3'UTR (750) .. (974)
 FT sig_peptide (39) .. (104).
 FEATURES Location/Qualifiers
 source 1. .974
 /organism="Homo sapiens"
 /mol_type="genomic DNA"
 /db_xref="taxon:9606"
 ORIGIN
 Query Match 88.2%; Score 370.6; DB 6; Length 974;
 Best Local Similarity 94.1%; Pred. No. 1.3e-112;
 Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;
 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCAGGTTCCAGATG 71
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 Db 44 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCAGGTTCCAGATG 103
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 Db 104 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC 163
 Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
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 Db 164 CATCACTTGTGGCGAGTCAGGGTATTAGCAGGGTGTAGCCTGGTATCAGCAGAAACC 223
 Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
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 Db 224 AGGGAAAGCCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 283
 Qy 252 AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311

Db	284	AAGGTTCAGCGGCAGTGGATCTGGGACAGATTCACTCTACCATCAGCAGCCTGCAGCC	343
Qy	312	TGAAGAGTTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCCGTACACTTTGGTCA	371
Db	344	TGAAGAGTTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCCGTGGACGTTCGGCCA	403
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	404	AGGGACCAAGGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC	452

RESULT 12

S59162

LOCUS S59162 433 bp mRNA linear PRI 26-JUN-2000
 DEFINITION Ig V kappa =anti-single/double-stranded DNA antibody NE-13 light chain variable region [human, B-cells, mRNA Partial, 433 nt].
 ACCESSION S59162
 VERSION S59162.1 GI:299955
 KEYWORDS
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 433)
 AUTHORS Hirabayashi,Y., Munakata,Y., Takai,O., Shibata,S., Sasaki,T. and Sano,H.
 TITLE Human B-cell clones expressing lupus nephritis-associated anti-DNA idiotypes are preferentially expanded without somatic mutation
 JOURNAL Scand. J. Immunol. 37 (5), 533-540 (1993)
 MEDLINE 93248539
 PUBMED 8387226
 REMARK GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 130630] from the original journal article.
 This sequence comes from Fig. 6.
 FEATURES Location/Qualifiers
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 /mol_type="mRNA"
 /db_xref="taxon:9606"
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 gene 1. .>433
 /gene="Ig Vkappa"
 CDS 1. .>433
 /gene="Ig Vkappa"
 /note="mismatches(74 [Y->T], 122 [N->D]); conceptual translation presented here differs from translation in publication"
 /codon_start=1
 /product="anti-single/double-stranded DNA antibody NE-13 light chain variable region"
 /protein_id="AAB26430.2"
 /db_xref="GI:8176528"
 /translation="MDMGVLVQLLGLLLWFPGSRCIDIQMTQSPSSVSASVGDRVTITCRASQGISSWLAWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSTDFTLTISLQPEDFATYYCQQANSFPYFPFGGKTKEIKRTVAAPSVFIFPPSD"

ORIGIN

Query Match 87.9%; Score 369; DB 9; Length 433;
 Best Local Similarity 93.9%; Pred. No. 4.4e-112;
 Matches 384; Conservative 0; Mismatches 25; Indels 0; Gaps 0;
 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTGCTCTGGTCCCAGGTTCCAGATG 71
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 Db 6 CATGGGAGTCCTAGTCAGCTCTGGGCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 65
 Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 131
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 Db 66 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 125
 Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC 191
 ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
 Db 126 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC 185
 Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCCATC 251
 ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
 Db 186 AGGGAAAGCCCCCTAACGCTCCTGATCTACGCTGCATCCAGTTGCAAAGTGGGTCCCATC 245
 Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
 ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
 Db 246 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 305
 Qy 312 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCCGTACACTTTGGTCA 371
 ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
 Db 306 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCCTTACCCCTTCGGCGG 365
 Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
 ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
 Db 366 AGGGAACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 414

RESULT 13

AR161375
 LOCUS AR161375 388 bp DNA linear PAT 17-OCT-2001
 DEFINITION Sequence 358 from patent US 6255458.
 ACCESSION AR161375
 VERSION AR161375.1 GI:16227235
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 Unclassified.
 REFERENCE 1 (bases 1 to 388)
 AUTHORS Lonberg, N. and Kay, R.M.
 TITLE High affinity human antibodies and human antibodies against digoxin
 JOURNAL Patent: US 6255458-A 358 03-JUL-2001;
 FEATURES Location/Qualifiers
 source 1..388
 /organism="unknown"
 /mol_type="unassigned DNA"

ORIGIN

Query Match 87.8%; Score 368.6; DB 6; Length 388;
 Best Local Similarity 97.7%; Pred. No. 5.9e-112;
 Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG	71
Db	6	CATGATGGTCCCCGCTCAGCTCCTGGGCTCTGCTCTGGTCCCAGGTTCCAGATG	65
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC	131
Db	66	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC	125
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Db	126	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	185
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	186	AGGGAAAGCCCCAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCATC	245
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	246	AAGGTTCAGCGGCAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	305
Qy	312	TGAAGATTTGCAACTTACTATTGTCACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	306	TGAAGATTTGCAACTTACTATTGTCACAGGCTAACAGTTCCGTACACTTTGGCCA	365
Qy	372	GGGAACCAAGCTGGAGATCAAAC	394
Db	366	GGGGACCAAGCTGGAGATCAAAC	388

RESULT 14

AR369968

LOCUS AR369968 388 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 206 from patent US 6300129.
ACCESSION AR369968
VERSION AR369968.1 GI:34606408
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 388)
AUTHORS Lonberg, N. and Kay, R.M.
TITLE Transgenic non-human animals for producing heterologous antibodies
JOURNAL Patent: US 6300129-A 206 09-OCT-2001;
FEATURES Location/Qualifiers
source 1. 388
/organism="unknown"
/mol type="genomic DNA"

ORIGIN

Query Match 87.8%; Score 368.6; DB 6; Length 388;
Best Local Similarity 97.7%; Pred. No. 5.9e-112;
Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGAGACAGAGTCAC	131
Db	66	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGAGACAGAGTCAC	125
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Db	126	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	185
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	186	AGGGAAAGCCCCAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	245
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCC	311
Db	246	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCC	305
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	306	TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCGTACACTTTGGCCA	365
Qy	372	GGGAACCAAGCTGGAGATCAAAC	394
Db	366	GGGGACCAAGCTGGAGATCAAAC	388

RESULT 15

BD096602

LOCUS BD096602 388 bp DNA linear PAT 27-AUG-2002

DEFINITION Transgenic non-human animals capable of producing heterologous antibodies.

ACCESSION BD096602

VERSION BD096602.1 GI:22642190

KEYWORDS JP 2001527386-A/129.

SOURCE unidentified

ORGANISM unidentified

REFERENCE 1 (bases 1 to 388)

AUTHORS Lonberg, N. and Kay, R.M.

TITLE Transgenic non-human animals capable of producing heterologous antibodies

JOURNAL Patent: JP 2001527386-A 129 25-DEC-2001;

GENPHARM INTERNATIONAL

COMMENT OS Unidentified

PN JP 2001527386-A/129

PD 25-DEC-2001

PF 01-DEC-1997 JP 1998525687

PR 02-DEC-1996 US 08/758417

PI NILS LONBERG, ROBERT M KAY

PC C12N5/00, C12N5/28, C12N5/24, C12N5/10, C07K16/00, A61K39/00 CC

Strandedness: Single;

CC Topology: Linear;

CC Transgenic non-human animals capable of producing heterologous

CC antibodies

FH Key Location/Qualifiers

FT source 1. .388

FT /organism='Unidentified'.
 FEATURES Location/Qualifiers
 source 1..388
 /organism="unidentified"
 /mol_type="genomic DNA"
 /db_xref="taxon:32644"
 ORIGIN
 Query Match 87.8%; Score 368.6; DB 6; Length 388;
 Best Local Similarity 97.7%; Pred. No. 5.9e-112;
 Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 71
 |||||
 Db 6 CATGATGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG 65
 |||||
 Qy 72 CGACATCCAGATGACCCAGTCAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 131
 |||||
 Db 66 CGACATCCAGATGACCCAGTCAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 125
 |||||
 Qy 132 CATCACTGTCGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
 |||||
 Db 126 CATCACTGTCGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 185
 |||||
 Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
 |||||
 Db 186 AGGGAAAGCCCCAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC 245
 |||||
 Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
 |||||
 Db 246 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 305
 |||||
 Qy 312 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCCGTACACTTTGGTCA 371
 |||||
 Db 306 TGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCCGTACACTTTGGCCA 365
 |||||
 Qy 372 GGGAACCAAGCTGGAGATCAAAC 394
 |||||
 Db 366 GGGGACCAAGCTGGAGATCAAAC 388

Search completed: December 2, 2004, 17:01:20

Job time : 2247.9 secs

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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:02 ; Search time 325.197 Seconds
 (without alignments)
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Title: US-08-728-463B-220
 Perfect score: 420
 Sequence: 1 AAGCTTGCCACCATGATGGT.....TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4134886 seqs, 2624710521 residues

Total number of hits satisfying chosen parameters: 8269772

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_23Sep04:*

1: geneseqn1980s:*

2: geneseqn1990s:*

3: geneseqn2000s:*

4: geneseqn2001as:*

5: geneseqn2001bs:*

6: geneseqn2002as:*

7: geneseqn2002bs:*

8: geneseqn2003as:*

9: geneseqn2003bs:*

10: geneseqn2003cs:*

11: geneseqn2003ds:*

12: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Query					Description
No.	Score	Match	Length	DB	ID	
1	420	100.0	420	2	AAT73445	Aat73445 Human imm
2	420	100.0	420	2	AAV39293	Aav39293 Synthetic
3	420	100.0	420	2	AAZ22047	Aaz22047 Nucleotid
4	420	100.0	3819	2	AAT78825	Aat78825 Kappa lig
5	420	100.0	3819	2	AAV39266	Aav39266 Plasmid p
6	420	100.0	3819	2	AAZ22020	Aaz22020 Nucleotid
7	370.6	88.2	974	6	AAS99473	Aas99473 Anti-huma
8	368.6	87.8	388	2	AAT73441	Aat73441 Human imm
9	368.6	87.8	388	2	AAV39239	Aav39239 Functiona
10	368.6	87.8	388	2	AAZ21993	Aaz21993 Partial n
11	365.8	87.1	728	8	ABT31882	Abt31882 Anti-CD40
12	365.6	87.0	711	11	ADM47072	Adm47072 Mouse ant
13	361.6	86.1	705	10	ADE28412	Ade28412 Human ant
14	361.6	86.1	705	10	ADE28428	Ade28428 Human ant
15	357.8	85.2	439	2	AAT73443	Aat73443 Human imm
16	356.2	84.8	439	2	AAZ21995	Aaz21995 Partial n
17	352.8	84.0	409	2	AAV39241	Aav39241 Functiona
18	346.8	82.6	401	12	ADH56388	Adh56388 Variable
19	346.4	82.5	463	8	AAD56221	Aad56221 Human AB-

20	346.4	82.5	6082	8	AAD56212	Aad56212 Human AB-
21	340.2	81.0	711	12	ADM32966	Adm32966 Nucleotid
22	338.6	80.6	1106	6	ABQ54241	Abq54241 Human ova
23	338.4	80.6	463	8	AAD56219	Aad56219 Human AB-
24	338.4	80.6	6082	8	AAD56211	Aad56211 Human AB-
25	337	80.2	438	4	AAH41157	Aah41157 Human cod
26	335.2	79.8	729	3	AAA11630	Aaa11630 Human imm
27	335.2	79.8	729	6	ABL46009	Ab146009 Humanised
28	333.8	79.5	981	12	ADP07904	Adp07904 Human imm
29	332.2	79.1	714	3	AAA46899	Aaa46899 DNA encod
30	332.2	79.1	714	10	AAD54350	Aad54350 Human 11.
31	330.6	78.7	490	9	ACH50647	Ach50647 Human mam
32	330.6	78.7	1066	2	AAQ49943	Aaq49943 Human ant
33	329	78.3	817	3	AAA27389	Aaa27389 Human IGF
34	326.6	77.8	591	6	ABQ56277	Abq56277 Human ova
35	325.8	77.6	871	8	ACC46532	Acc46532 Human dit
36	325.8	77.6	944	4	AAF44892	Aaf44892 Human bre
37	325.8	77.6	19035	2	AAV61794	Aav61794 Traget pl
38	324.2	77.2	698	8	ABT31880	Abt31880 Anti-CD40
39	323.2	77.0	384	2	AAT46133	Aat46133 Monoclonal
40	323.2	77.0	384	2	AAT85844	Aat85844 Monoclonal
41	323.2	77.0	384	10	AAL56203	Aal56203 Human C40
42	323.2	77.0	384	12	ADQ20176	Adq20176 Human sof
43	322.6	76.8	1526	12	ADN97514	Adn97514 Artificia
44	322.4	76.8	463	8	AAD56217	Aad56217 Human AB-
45	322.4	76.8	6082	8	AAD56210	Aad56210 Human AB-

ALIGNMENTS

RESULT 1

AAT73445

ID AAT73445 standard; DNA; 420 BP.

XX

AC AAT73445;

XX

DT 03-DEC-1997 (first entry)

XX

DE Human immunoglobulin light chain variable region partial transcript.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene; transgenic; mouse; CD4; antibody; autoimmune; inflammatory; transplant rejection; ss.

XX

OS Homo sapiens.

XX

PN WO9713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX
DR WPI; 1997-235888/21.

PT Novel anti-CD4 antibody produced by transgenic mice - used in the
PT treatment of auto-immune disease etc.

PS Claim 45; Page 272-273; 396pp; English.

CC A novel composition has been developed which comprises an immunoglobulin
CC (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M
CC $^{-1}$ for binding to a predetermined human antigen. The present sequence
CC represents a human light chain variable region partial nucleotide
CC sequence, LC6G5, which encodes an amino acid sequence from a claimed
CC immunoglobulin that specifically binds human CD4. The anti-CD4 antibodies
CC may be used in therapeutic and diagnostic applications, especially for
CC the treatment of human diseases. These antibodies reduce activity of CD4
CC cells and reduce undesirable autoimmune reactions, inflammatory response
CC and transplant rejection. Transgenic animals are capable of producing
CC heterologous antibodies of multiple isotypes by undergoing isotype
CC switching. These animals produce a first Ig type that is necessary for
CC antigen-stimulated B-cell maturation and can switch to encode and produce
CC one or more subsequent heterologous isotypes

Sequence 420 BP; 98 A; 116 C; 98 G; 108 T; 0 U; 0 Other;

Query Match 100.0%; Score 420; DB 2; Length 420;
Best Local Similarity 100.0%; Pred. No. 6.4e-122;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCA 60

Qv 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTCCGTGTGCATCTGTAGGA 120

Db 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATTTCCGTGTGCATCTGTAGGA 120

Db 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTAT 180

QY 181 CAGCATAAACCAAGGTAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 240

Qy 241 GGTGTCCCATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCACAGC 300

Db 241 GGTGTCCCATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC 300

Db 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTAC 360

Qy 361 ACTTTGGTCAGGGAAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420

RESULT 2
AAV39293
ID AAV39293 standard; DNA; 420 BP.
XX
AC AAV39293;
XX
DT 18-DEC-1998 (first entry)
XX
DE Synthetic kappa light chain sequence LC6G5.
XX
KW Transgenic animal; human heterologous antibody; transgene;
KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
KW autoimmune reaction; inflammatory response; transplant rejection;
KW acid induced lung injury; acute adult respiratory distress syndrome;
KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
KW cystic fibrosis; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9824884-A1.
XX
PD 11-JUN-1998.
XX
PF 01-DEC-1997; 97WO-US021803.
XX
PR 02-DEC-1996; 96US-00758417.
XX
PA (GENP-) GENPHARM INT.
XX
PI Lonberg N, Kay RM;
XX
DR WPI; 1998-333306/29.
XX
PT Hybridoma producing antibody specific for interleukin-8 - used to prevent
PT efflux of neutrophils from vasculature, and treat reperfusion injury.
XX
PS Example 42; Page 324-325; 452pp; English.
XX
CC The present sequence represents a synthetic kappa light sequence (created
CC using oligonucleotides AAV39267-78). This synthetic sequence differs from
CC natural sequences in that strings of repeated oligonucleotides are
CC interrupted (to facilitate oligonucleotide synthesis and PCR
CC amplification), optimal translation initiation sites are incorporated and
CC HindII sites were engineered upstream of the translation initiation
CC sites. The sequence is used to make plasmid pHG6G5, which is used in the
CC construction of minigenes for expression of IgGkappa anti-CD4 antibodies,
CC in the transgenic mouse of the invention. The specification describes
CC transgenic non-human animals, especially a mouse, which are capable of
CC producing a human heterologous antibodies of multiple isotypes by
CC undergoing isotype switching. The transgenic animals have human heavy and
CC light chain transgenes. The transgenes are capable of functionally
CC rearranging a heterologous diversity (D) gene in a variable-diversity-
CC junction (V-D-J) recombination. The transgenes include a heavy chain
CC transgene comprising at least one V, D and J gene segment, and one

CC constant region gene segment. The immunoglobulin (Ig) light chain
CC transgene comprises at least one V and J gene segment and one constant
CC region gene segment. The gene segments are heterologous to the transgenic
CC animal. The antibody can be used to prevent efflux of neutrophils from
CC vasculature. It can also be used to treat reperfusion injury. CD4 binding
CC antibodies are used to reduce undesirable autoimmune reactions,
CC inflammatory responses and rejection of transplanted organs. The anti-IL-
CC 8 antibodies can reduce tissue damage and prolong survival in animal
CC models of acute adult respiratory distress syndrome (ARDS) and acid
CC induced lung injury. The anti-IL-8 antibodies can also be used for the
CC treatment of vasculitis, septic shock, allergic reactions (e.g. asthma)
CC and cystic fibrosis

xx

SO Sequence 420 BP; 98 A; 116 C; 98 G; 108 T; 0 U; 0 Other;

Query Match 100.0%; Score 420; DB 2; Length 420;
Best Local Similarity 100.0%; Pred. No. 6.4e-122;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCCTGCTGCTGGTCCCCA 60

Db 1 AAGCTTGCCACCATGATGGTCCAGCTAGCTCTCGGTCTCCTGCTGCTCTGGTTCCCA 60

Qy 61 GGTTCCAGATGCGACATCCAGATGCCAGTCTCCATCTCCGTCTGCATCTGTAGGA 120

— 100 —

QY 121 GACAGAGTCACCATCACTTGTGGGGAGAGCAGGATAATTAGCAGCTGGTTAGCCCTGGGAT 180

Qy 181 CAGCATAAACCAAGGTAAGCACCTAAGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 240

Db 181 CAGCATAAACCAAGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 240

6 CCTATGCCATCAACCTTGAGCCAGCTGGATCTGGAGCAGATTCGACCTGAGGATGAGC 300

Ph 341 CCTGTTGGATCTAAGCTTCAGCCCTAGCTGATCTGGGAGAGATTTCAGTCTGACCATGAG 300

BB 241 CCCCCCCCAAAACCTTCAACCCAACTTCCACCTTCCCCACCTTTCACCTTCTTCCCCCTTCC 333

Qy 501 ACCESSORIES FOR AIR FRESHENERS

Db 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGTAATAGTTCCCGTAC 360

Qy 361 ACTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAAC TGTGGCTGACCCATCTGTCTTC 420

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RESULT 3

AA
TR

ID AAZZZ047
VV

100

AC AAZ2Z047,
XX

DT

XX

XX
KW Transgenic animal; heterologous antibody; hybridoma; B cell;
KW transgenic mouse; human heavy chain transgene; digoxin;
KW human light chain transgene; immortalized cell; immunoglobulin;
KW Shinga-like toxin; autoimmune disease; cancer; infectious disease;
KW transplant rejection; blood disorder; coagulation disorder; ss.

XX
OS Synthetic.

XX
PN WO9945962-A1.

XX
PD 16-SEP-1999.

XX
PF 12-MAR-1999; 99WO-US005535.

XX
PR 13-MAR-1998; 98US-00042353.

XX
PA (GENP-) GENPHARM INT INC.

XX
PI Lonberg N, Fishwild DM, Ball WJ;

XX
DR WPI; 1999-551219/46.

XX
PT Novel transgenic non-human animals used to produce heterologous
PT antibodies.

XX
PS Example 42; Page 325-326; 484pp; English.

XX
CC The specification describes transgenic animals that are capable of
CC producing a heterologous antibody. The antibodies are isolated from a
CC hybridoma, comprising B cells, that is obtained from a transgenic mouse
CC having a genome comprising a human heavy chain transgene and a human
CC light chain transgene. The B cells are fused to immortalized cells
CC suitable for generating a hybridoma, which produces a detectable amount
CC of an immunoglobulin that specifically binds digoxin or Shinga-like
CC toxin. B cells from transgenic animals can be used to generate hybridomas
CC expressing monoclonal high affinity human sequence antibodies. Antibodies
CC produced from the transgenic animals of the invention can be used to
CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
CC disease, transplant rejection, blood disorders such as coagulation
CC disorders and other diseases. The present sequence is used in the course
CC of the invention

XX
SQ Sequence 420 BP; 98 A; 116 C; 98 G; 108 T; 0 U; 0 Other;

Query Match 100.0%; Score 420; DB 2; Length 420;
Best Local Similarity 100.0%; Pred. No. 6.4e-122;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA 60
Db 1 AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA 60

Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
Db 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120

Qy	121	GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT	180
Db	121	GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT	180
Qy	181	CAGCATAAACCAAGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT	240
Db	181	CAGCATAAACCAAGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT	240
Qy	241	GGTGTCCCATCAAGGTTCAAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC	300
Db	241	GGTGTCCCATCAAGGTTCAAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC	300
Qy	301	AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTGTCCGTAC	360
Db	301	AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTGTCCGTAC	360
Qy	361	ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	361	ACTTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420

RESULT 4

AAT78825

ID AAT78825 standard; DNA; 3819 BP.

XX

AC AAT78825;

XX

DT 23-JAN-1998 (first entry)

XX

DE Kappa light chain plasmid pLC6G5.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene;

KW transgenic; mouse; CD4; antibody; autoimmune; inflammatory;

KW transplant rejection; immunoglobulin; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1997-235888/21.

XX

PT Novel anti-CD4 antibody produced by transgenic mice - used in the
PT treatment of auto-immune disease etc.

XX

PS Example 42; Page 266-268; 396pp; English.

XX

CC A novel composition has been developed which comprises an immunoglobulin (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M⁻¹ for binding to a predetermined human antigen. The present sequence represents the kappa light chain plasmid pLC6G5 which includes the kappa constant region and polyadenylation site. Anti- CD4 antibodies may be used in therapeutic and diagnostic applications, especially for the treatment of human diseases. These antibodies reduce activity of CD4 cells and reduce undesirable autoimmune reactions, inflammatory response and transplant rejection. Transgenic animals are capable of producing heterologous antibodies of multiple isotypes by undergoing isotype switching. These animals produce a first Ig type that is necessary for antigen-stimulated B-cell maturation and can switch to encode and produce one or more subsequent heterologous isotypes

XX

SQ Sequence 3819 BP; 947 A; 1015 C; 912 G; 945 T; 0 U; 0 Other;

Query Match 100.0%; Score 420; DB 2; Length 3819;
Best Local Similarity 100.0%; Pred. No. 1.5e-121;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCCA 60
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2434 AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCCA 2493

Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553

Qy 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2554 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

Qy 181 CAGCATAAACCAAGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 240
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2614 CAGCATAAACCAAGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 2673

Qy 241 GGTGTCCCACATCAAGGTTAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC 300
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2674 GGTGTCCCACATCAAGGTTAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC 2733

Qy 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTAC 360
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2734 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTAC 2793

Qy 361 ACTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACACTGTGGCTGCACCATCTGTCTTC 420
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2794 ACTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACACTGTGGCTGCACCATCTGTCTTC 2853

RESULT 5

AAV39266

ID AAV39266 standard; DNA; 3819 BP.

XX

AC AAV39266;

XX

DT 18-DEC-1998 (first entry)

XX

DE Plasmid pLC6G5 nucleotide sequence.
XX
KW Transgenic animal; human heterologous antibody; transgene;
KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
KW autoimmune reaction; inflammatory response; transplant rejection;
KW acid induced lung injury; acute adult respiratory distress syndrome;
KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
KW cystic fibrosis; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9824884-A1.
XX
PD 11-JUN-1998.
XX
PF 01-DEC-1997; 97WO-US021803.
XX
PR 02-DEC-1996; 96US-00758417.
XX
PA (GENP-) GENPHARM INT.
XX
PI Lonberg N, Kay RM;
XX
DR WPI; 1998-333306/29.
XX
PT Hybridoma producing antibody specific for interleukin-8 - used to prevent
PT efflux of neutrophils from vasculature, and treat reperfusion injury.
XX
PS Example 42; Page 317-319; 452pp; English.
XX
CC The present sequence represents a plasmid, pLC6G5, which contains a
CC synthetic kappa light chain sequence (created using oligonucleotide
CC AAV39244-65). This synthetic sequence differs from natural sequences in
CC that strings of repeated oligonucleotides are interrupted (to facilitate
CC oligonucleotide synthesis and PCR amplification), optimal translation
CC initiation sites are incorporated and HindII sites were engineered
CC upstream of the translation initiation sites. The plasmid is used in the
CC construction of minigenes for expression of IgGkappa anti-CD4 antibodies,
CC in the transgenic mouse of the invention. The specification describes
CC transgenic non-human animals, especially a mouse, which are capable of
CC producing a human heterologous antibodies of multiple isotypes by
CC undergoing isotype switching. The transgenic animals have human heavy and
CC light chain transgenes. The transgenes are capable of functionally
CC rearranging a heterologous diversity (D) gene in a variable-diversity-
CC junction (V-D-J) recombination. The transgenes include a heavy chain
CC transgene comprising at least one V, D and J gene segment, and one
CC constant region gene segment. The immunoglobulin (Ig) light chain
CC transgene comprises at least one V and J gene segment and one constant
CC region gene segment. The gene segments are heterologous to the transgenic
CC animal. The antibody can be used to prevent efflux of neutrophils from
CC vasculature. It can also be used to treat reperfusion injury. CD4 binding
CC antibodies are used to reduce undesirable autoimmune reactions,
CC inflammatory responses and rejection of transplanted organs. The anti-IL-
CC 8 antibodies can reduce tissue damage and prolong survival in animal
CC models of acute adult respiratory distress syndrome (ARDS) and acid
CC induced lung injury. The anti-IL-8 antibodies can also be used for the

CC treatment of vasculitis, septic shock, allergic reactions (e.g. asthma)
 CC and cystic fibrosis
 XX
 SQ Sequence 3819 BP; 947 A; 1015 C; 912 G; 945 T; 0 U; 0 Other;
 Query Match 100.0%; Score 420; DB 2; Length 3819;
 Best Local Similarity 100.0%; Pred. No. 1.5e-121;
 Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCA 60
 |||||||
 Db 2434 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCA 2493
 QY 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
 |||||||
 Db 2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553
 QY 121 GACAGAGTCACCACACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
 |||||||
 Db 2554 GACAGAGTCACCACACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613
 QY 181 CAGCATAAACCAAGGTAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 240
 |||||||
 Db 2614 CAGCATAAACCAAGGTAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 2673
 QY 241 GGTGTCCCCTCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGC 300
 |||||||
 Db 2674 GGTGTCCCCTCAAGGTTCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGC 2733
 QY 301 AGCCTGCAGCCTGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTAC 360
 |||||||
 Db 2734 AGCCTGCAGCCTGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTAC 2793
 QY 361 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
 |||||||
 Db 2794 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 2853

RESULT 6
 AAZ22020
 ID AAZ22020 standard; DNA; 3819 BP.
 XX
 AC AAZ22020;
 XX
 DT 24-NOV-1999 (first entry)
 XX
 DE Nucleotide sequence of plasmid pLC6G5.
 XX
 KW Transgenic animal; heterologous antibody; hybridoma; B cell;
 KW transgenic mouse; human heavy chain transgene; digoxin;
 KW human light chain transgene; immortalized cell; immunoglobulin;
 KW Shiga-like toxin; autoimmune disease; cancer; infectious disease;
 KW transplant rejection; blood disorder; coagulation disorder; ss.
 XX
 OS Synthetic.
 XX
 PN WO9945962-A1.

XX
PD 16-SEP-1999.
XX
PF 12-MAR-1999; 99WO-US005535.
XX
PR 13-MAR-1998; 98US-00042353.
XX
PA (GENP-) GENPHARM INT INC.
XX
PI Lonberg N, Fishwild DM, Ball WJ;
XX
DR WPI; 1999-551219/46.
XX
PT Novel transgenic non-human animals used to produce heterologous
PT antibodies.
XX
PS Example 42; Page 318-320; 484pp; English.

XX
CC The specification describes transgenic animals that are capable of
CC producing a heterologous antibody. The antibodies are isolated from a
CC hybridoma, comprising B cells, that is obtained from a transgenic mouse
CC having a genome comprising a human heavy chain transgene and a human
CC light chain transgene. The B cells are fused to immortalized cells
CC suitable for generating a hybridoma, which produces a detectable amount
CC of an immunoglobulin that specifically binds digoxin or Shinga-like
CC toxin. B cells from transgenic animals can be used to generate hybridomas
CC expressing monoclonal high affinity human sequence antibodies. Antibodies
CC produced from the transgenic animals of the invention can be used to
CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
CC disease, transplant rejection, blood disorders such as coagulation
CC disorders and other diseases. The present sequence is used in the course
CC of the invention

XX
SQ Sequence 3819 BP; 947 A; 1015 C; 912 G; 945 T; 0 U; 0 Other;

Query Match 100.0%; Score 420; DB 2; Length 3819;
Best Local Similarity 100.0%; Pred. No. 1.5e-121;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCCA 60
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2434 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCCA 2493

Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553

Qy 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2554 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

Qy 181 CAGCATAAACCAAGGTAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 240
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2614 CAGCATAAACCAAGGTAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 2673

Qy 241 GGTGTCCCATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGC 300
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 2674 GGTGTCCCATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGC 2733
QY 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTAC 360
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2734 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTAC 2793
QY 361 ACTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2794 ACTTTGGTCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 2853

RESULT 7

AAS99473

ID AAS99473 standard; cDNA; 974 BP.

XX

AC AAS99473;

XX

DT 12-MAR-2002 (first entry)

XX

DE Anti-human AILIM monoclonal antibody clone Jmab-136, light chain cDNA.

XX

KW Human; antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
KW antiallergic; antiulcer; neuroprotective; antithyroid; vasotropic;
KW immunosuppressive; dermatological; antiinflammatory; hepatotropic;
KW activation inducible lymphocyte immunomodulatory molecule; AILIM;
KW monoclonal antibody; allergy; rheumatoid arthritis; diabetes mellitus;
KW multiple sclerosis; autoimmune thyroiditis; psoriasis; hepatitis;
KW allergic contact-type dermatitis; chronic inflammatory dermatosis;
KW systemic lupus erythematosus; autoimmune disorder; inflammation; ss;
KW graft versus host reaction; immune rejection; intestinal immunity;
KW ulcerative colitis; pneumonia; nephritis; vasculitis; pancreatitis.

XX

OS Homo sapiens.

XX

PN WO200187981-A2.

XX

PD 22-NOV-2001.

XX

PF 15-MAY-2001; 2001WO-JP004035.

XX

PR 18-MAY-2000; 2000JP-00147116.

PR 30-MAR-2001; 2001JP-00099508.

XX

PA (NISB) JAPAN TOBACCO INC.

XX

PI Tsuji T, Tezuka K, Hori N;

XX

DR WPI; 2002-075313/10.

DR P-PSDB; AAU74297.

XX

PT New human monoclonal antibody that binds to activation inducible
PT lymphocyte immunomodulatory molecule, useful for treating rheumatoid
PT arthritis, multiple sclerosis and inflammation.

XX

PS Claim 45; Page 267-270; 300pp; English.

XX

CC The invention relates to a novel human antibody (I), preferably a human

CC monoclonal antibody which binds to an activation inducible lymphocyte
CC immunomodulatory molecule (AILIM). (I) is useful for modulating signal
CC transduction into a cell mediated by AILIM, for modulating proliferation
CC of AILIM-expressing cells, for modulating production of a cytokine from
CC AILIM-expressing cells, and for inducing antibody-dependent cytotoxicity
CC against AILIM-expressing cells and/or immune cytolysis or apoptosis of
CC AILIM-expressing cells. (I) is useful for treating, preventing or
CC prophylaxis of delayed type allergy. (I) is useful for treating and
CC preventing various diseases associated with AILIM-mediated costimulatory
CC transduction, and for inhibiting the onset and/or advancement of the
CC diseases. (I) is useful for suppression, prevention and/or treatment of
CC rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis,
CC allergic contact-type dermatitis, chronic inflammatory dermatosis,
CC systemic lupus erythematosus, insulin-dependent diabetes mellitus,
CC psoriasis, autoimmune or allergic disorders, inflammation, graft versus
CC host reaction, graft versus host disease, immune rejection, disorders
CC caused by abnormal intestinal immunity, specifically inflammatory
CC intestinal disorders such as ulcerative colitis, pneumonia, hepatitis,
CC nephritis, vasculitis, and pancreatitis. (I) induces no serious
CC immunorejection due to antigenicity to human, i.e., human anti-mouse
CC antigenicity (HAMA) in a host. AAS99444-AAS99477 represent anti-human
CC AILIM monoclonal antibody coding sequences and PCR primers of the
CC invention

XX

SQ Sequence 974 BP; 246 A; 282 C; 232 G; 214 T; 0 U; 0 Other;

Query Match 88.2%; Score 370.6; DB 6; Length 974;
Best Local Similarity 94.1%; Pred. No. 3.3e-106;
Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
Db 44 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG 103

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
Db 104 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 163

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
Db 164 CATCACTTGTGGCGAGTCAGGTATTAGCAGGGTTAGCCTGGTATCAGCAGAAC 223

Qy 192 AGGTAAAGCACCTAACGCTCTGATCTGCTGCATCCAGTTGCAAAGTGGTGTCCATC 251
Db 224 AGGGAAAGCCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 283

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 284 AAGGTTCAGCGGCAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 343

Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGGTCA 371
Db 344 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTGGACGTTCCGCCA 403

Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 404 AGGGACCAAGGTGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC 452

RESULT 8

AAT73441

ID AAT73441 standard; DNA; 388 BP.

XX

AC AAT73441;

XX

DT 03-DEC-1997 (first entry)

XX

DE Human immunoglobulin light chain variable region partial transcript.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene;

KW transgenic; mouse; CD4; antibody; autoimmune; inflammatory;

KW transplant rejection; ss.

XX

OS Homo sapiens.

XX

PN WO9713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1997-235888/21.

XX

PT Novel anti-CD4 antibody produced by transgenic mice - used in the
PT treatment of auto-immune disease etc.

XX

PS Claim 44; Page 255; 396pp; English.

XX

CC A novel composition has been developed which comprises an immunoglobulin
CC (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M
CC -1 for binding to a predetermined human antigen. The present sequence
CC represents a human light chain variable region partial nucleotide
CC sequence, 10C5 kappa, which encodes an amino acid sequence from a claimed
CC immunoglobulin that specifically binds human CD4. The anti-CD4 antibodies
CC may be used in therapeutic and diagnostic applications, especially for
CC the treatment of human diseases. These antibodies reduce activity of CD4
CC cells and reduce undesirable autoimmune reactions, inflammatory response
CC and transplant rejection. Transgenic animals are capable of producing
CC heterologous antibodies of multiple isotypes by undergoing isotype
CC switching. These animals produce a first Ig type that is necessary for
CC antigen-stimulated B-cell maturation and can switch to encode and produce
CC one or more subsequent heterologous isotypes

XX

SQ Sequence 388 BP; 89 A; 107 C; 97 G; 95 T; 0 U; 0 Other;

Query Match 87.8%; Score 368.6; DB 2; Length 388;

Best Local Similarity 97.7%; Pred. No. 9.9e-106;

Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATG	71
Db	6	CATGATGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCAGGTTCCAGATG	65
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	131
Db	66	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	125
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Db	126	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	185
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	186	AGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	245
Qy	252	AAGGTTAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	246	AAGGTTAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	305
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	306	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGCCA	365
Qy	372	GGGAACCAAGCTGGAGATCAAAC	394
Db	366	GGGGACCAAGCTGGAGATCAAAC	388

RESULT 9

AAV39239

ID AAV39239 standard; DNA; 388 BP.

xx

AC AAV39239;

xx

DT 18-DEC-1998 (first entry)

xx

DE Functional Kappa transcript isolated from transgenic cell line 10C5.

XX

KW Transgenic animal; human heterologous antibody; transgene;
KW isotype switching; neutrophil efflux; reperfusion injury; CD4 binding;
KW autoimmune reaction; inflammatory response; transplant rejection;
KW acid induced lung injury; acute adult respiratory distress syndrome;
KW ARDS; vasculitis; septic shock; allergic reaction; asthma;
KW cystic fibrosis; ss.

XX

OS Synthetic.

OS Homo sapiens.

OS Mus sp.

xx

PN WO9824884-A1.

xx

PD 11-JUN-1998.

xx

PF 01-DEC-1997; 97WO-US021803.

XX

PR 02-DEC-1996; 96US-00758417.

XX

PA (GENP-) GENPHARM INT.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1998-333306/29.

XX

PT Hybridoma producing antibody specific for interleukin-8 - used to prevent efflux of neutrophils from vasculature, and treat reperfusion injury.

XX

PS Example 41; Page 304; 452pp; English.

XX

CC AAV39232-41 represent functional transcripts of a human IgGKappa anti-CD4 antibody. The sequences are isolated from 5 different transgenic mouse hybridoma cell lines. The specification describes transgenic non-human animals, especially a mouse, which are capable of producing a human heterologous antibodies of multiple isotypes by undergoing isotype switching. The transgenic animals have human heavy and light chain transgenes. The transgenes are capable of functionally rearranging a heterologous diversity (D) gene in a variable-diversity-junction (V-D-J) recombination. The transgenes include a heavy chain transgene comprising at least one V, D and J gene segment, and one constant region gene segment. The immunoglobulin (Ig) light chain transgene comprises at least one V and J gene segment and one constant region gene segment. The gene segments are heterologous to the transgenic animal. The antibody can be used to prevent efflux of neutrophils from vasculature. It can also be used to treat reperfusion injury. CD4 binding antibodies are used to reduce undesirable autoimmune reactions, inflammatory responses and rejection of transplanted organs. The anti-IL-8 antibodies can reduce tissue damage and prolong survival in animal models of acute adult respiratory distress syndrome (ARDS) and acid induced lung injury. The anti-IL-8 antibodies can also be used for the treatment of vasculitis, septic shock, allergic reactions (e.g. asthma) and cystic fibrosis

XX

SQ Sequence 388 BP; 89 A; 107 C; 97 G; 95 T; 0 U; 0 Other;

Query Match 87.8%; Score 368.6; DB 2; Length 388;
Best Local Similarity 97.7%; Pred. No. 9.9e-106;
Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71

Db 6 CATGATGGTCCCCGCTCAGCTCCTGGGCTCTGCTCTGGTCCCAGGTTCCAGATG 65

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCAGCATCTGTAGGAGACAGAGTCAC 131

Db 66 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCAGCATCTGTAGGAGACAGAGTCAC 125

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191

Db 126 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 185

Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251

Db 186 AGGGAAAGCCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC 245

CC of an immunoglobulin that specifically binds digoxin or Shinga-like
CC toxin. B cells from transgenic animals can be used to generate hybridomas
CC expressing monoclonal high affinity human sequence antibodies. Antibodies
CC produced from the transgenic animals of the invention can be used to
CC treat human diseases, e.g. autoimmune diseases, cancer, infectious
CC disease, transplant rejection, blood disorders such as coagulation
CC disorders and other diseases. The present sequence represents a partial
CC nucleotide sequence for a functional transcript used in the course of the
CC invention

xx

SO Sequence 388 BP; 89 A; 107 C; 97 G; 95 T; 0 U; 0 Other;

Query Match 87.8%; Score 368.6; DB 2; Length 388;
 Best Local Similarity 97.7%; Pred. No. 9.9e-106;
 Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCCTGCTCTGGTCCCAGGTTCCAGATG 71

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC 131

Db 66 CGACATCCAGATGACCCAGTCTCCATTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 125

Qy 152 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 185
Pb 126 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAACC 185

QY 192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCCATC 251

Qv 252 AAGGTTCAAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 311

Db 246 AAGGTTCAGCGGAGTGGATCTGGACAGATTCACTCTACCATCAGCAGCCTGCAGCC 305

Qy 312 TCAAGAATTTGCACTTACTATTGTCAACAGGCTAATAGTTCCGTACACTTTGGCCA 365
Dy 306

Ov 372 GGGAACCAAGCTGGAGATCAAAC 394

Db 366 GGGGACCAAGCTGGAGATCAAAC 388

RESULT 11

ABT31882

ID ABT31882 standard: DNA: 728 BP.

xx

AC ABT31882:

xx

PT 01-MAY-2003 (first entry)

xx

DE Anti-CD40 monoclonal antibody related DNA SEQ ID No 65.

xx

KW Antiallergic; haemostatic; immunomodulator; cytostatic; antibody; human CD40; IL-12; LPS; lipopolysaccharide; IFNgamma; interferon gamma;

KW dendritic cell; high G28-5; CD95 expression; high G28-5; B cell line;
KW immunoactivator; anti-tumour agent; immunosuppressant; allergy;
KW autoimmune disease; coagulation factor VIII inhibitor; anti-CD40; gene;
KW ds.
XX
OS Unidentified.
XX
PN WO200288186-A1.
XX
PD 07-NOV-2002.
XX
PF 26-APR-2002; 2002WO-JP004292.
XX
PR 27-APR-2001; 2001WO-US013672.
PR 11-MAY-2001; 2001JP-00142482.
PR 05-OCT-2001; 2001JP-00310535.
PR 26-OCT-2001; 2001US-00040244.
XX
PA (KIRI) KIRIN BEER KK.
XX
PI Mikayama T, Yoshida H, Force WR, Chen X, Takahashi N;
XX
DR WPI; 2003-120463/11.
DR P-PSDB; ABJ36940.
XX
PT Anti-CD40 monoclonal antibody with antagonist/agonist activity to CD40,
PT or functional fragment, is useful in the treatment of e.g. autoimmune
PT diseases or cancer.
XX
PS Claim 16; Page 59-60; 94pp; Japanese.
XX
CC The invention relates to an antibody to human CD40, or its functional
CC fragment, has at least one of the following properties: acting on
CC dendritic cells to produce IL-12 in the presence of LPS
CC (lipopolysaccharide) and IFNgamma (interferon gamma); acting on dendritic
CC cells to activate maturity of the dendritic cells with high G28-5
CC antibody; and activating CD95 expression with high G28-5 antibody against
CC B cell line. Such antibodies or functional fragments can be used as
CC immunoactivators, anti-tumour agents, immunosuppressants, and as remedies
CC for autoimmune diseases, allergy or coagulation factor VIII inhibitors
CC syndrome. This polynucleotide sequence represents a coding DNA sequence
CC relating to the anti-CD40 monoclonal antibody of the invention
XX
SQ Sequence 728 BP; 183 A; 201 C; 195 G; 149 T; 0 U; 0 Other;

Query Match 87.1%; Score 365.8; DB 8; Length 728;
Best Local Similarity 93.4%; Pred. No. 9.7e-105;
Matches 382; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCAGGTTCCAGATG 71
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 64 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTCTGGTTCCAGGTTCCAGATG 123
Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 131
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 124 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGGATCTGTAGGAGACAGAGTCAC 183

Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	184	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC	243
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	244	AGGGAAAGCCCCTAACGCTCCTGATCTATGCTGGATCCAGTTGCAAAGTGGGTCCCATC	303
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	304	AAGGTTCAGCGGCAGTGGATTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	363
Qy	312	TGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	364	TGAAGATTGCAACTTACTATTGTCAACAGGCTAGCAGTTCCCTCGGACATTGGCCA	423
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCACATCTGTCTTC	420
Db	424	AGGGACCAAGGTGGAGATCAAACGTACGGTGGCTGCACCACATCTGTCTTC	472

RESULT 12

ADM47072

ID ADM47072 standard; DNA; 711 BP.

XX

AC ADM47072;

XX

DT 03-JUN-2004 (first entry)

XX

DE Mouse anti-human G-CSF antibody light chain gene.

XX

KW methylotroph yeast; mammalian sugar chain; OCH1; alpha-1;

KW 6-mannosyl transferase; alpha-1; 2-mannosidase;

KW orotidin-5'-phosphate decarboxylase; URA3;

KW phosphoribosyl-amino-imidazole succinocarboxamide synthase; ADE1;

KW imidazole-glycerol-phosphate dehydratase; HIS3;

KW 3-isopropyl malate dehydrogenase; LEU2; proteinase A; proteinase B; PRB1;

KW PEP4; YPS1; KTR1; MNN9; AOX; GAPDH; mannosyl transferase;

KW glyceraldehyde 3-phosphate dehydrogenase; mannose glycoprotein; ds; gene.

XX

OS Mus sp.

XX

PN WO2003091431-A1.

XX

PD 06-NOV-2003.

XX

PF 28-APR-2003; 2003WO-JP005464.

XX

PR 26-APR-2002; 2002JP-00127677.

XX

PA (KIRI) KIRIN BEER KK.

PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

XX

PI Kobayashi K, Kitagawa Y, Komeda T, Kawashima N, Jigami Y;

PI Chiba Y;

XX

DR WPI; 2003-854401/79.

XX
PT Producing methylotroph yeast that expresses mammalian sugar chains by
PT disrupting the OCH1 gene and inserting an alpha-1,2-mannosidase gene.
XX
PS Example 28; SEQ ID NO 91; 247pp; Japanese.
XX
CC The invention relates to the production of a methylotroph yeast that
CC produces mammalian sugar chains, comprising disrupting the OCH1 gene in
CC the yeast that encodes for alpha-1,6-mannosyl transferase and inserting
CC and expressing the alpha-1,2-mannosidase gene. The specification also
CC includes DNA sequences encoding: (a) orotidin-5'-phosphate decarboxylase
CC (URA3); (b) phosphoribosyl-amino-imidazole succinocarboxamide synthase
CC (ADE1); (c) imidazole-glycerol-phosphate dehydratase (HIS3); (d) 3-
CC isopropyl malate dehydrogenase (LEU2); (e) alpha-1,6-mannosyl transferase
CC (OCH1); (f) proteinase A (PEP4); (g) proteinase B (PRB1); and (h)
CC aspartic protease (YPS1), mannosyl transferase (KTR1 or MNN9), alcohol
CC oxidase (AOX) and glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene
CC sequences. The yeast is used for the production of human and mammalian
CC high mannose glycoproteins with high yield and purity. The method is also
CC useful for producing hybrid or complex sugar chains containing mammalian
CC type chains. This sequence represents the gene encoding a mouse anti-
CC human G-CSF antibody light chain used in the invention.
XX
SQ Sequence 711 BP; 176 A; 203 C; 182 G; 150 T; 0 U; 0 Other;

Query Match 87.0%; Score 365.6; DB 11; Length 711;
Best Local Similarity 93.0%; Pred. No. 1.1e-104;
Matches 383; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy 9 CACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTGCTCTGGTCCAGGTTCCAG 68
Db 3 CACCATGAGGGTCCCCGCTCAGCTCCTGGGCTCTGCTGCTCTGGCTCCAGGTGCACG 62

Qy 69 ATGCGACATCCAGATGACCCAGTCTCCATCTTCCCGTGTGCATCTGTAGGAGACAGAGT 128
Db 63 ATGTGACATCCAGATGACCCAGTCTCCATCTTCCCGTGTGCATCTGTAGGAGACAGAGT 122

Qy 129 CACCATCACTTGTGGCGAGTCAGGATAATTAGCAGCTGGTTAGCCTGGTATCAGCATAA 188
Db 123 CACCATCACTTGTGGCGAGTCAGGTTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAA 182

Qy 189 ACCAGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCC 248
Db 183 ACCAGGGAAAGCCCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCC 242

Qy 249 ATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCA 308
Db 243 ATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCA 302

Qy 309 GCCTGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCGTACACTTTGG 368
Db 303 GCCTGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCGTACGTTCCGACGTTGG 362

Qy 369 TCAGGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 363 CCAAGGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTC 414

RESULT 13

ADE28412

ID ADE28412 standard; cDNA; 705 BP.

XX

AC ADE28412;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human anti-CD40 antibody 10-8-3 variable region light chain cDNA.

XX

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;

KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;

KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;

KW human; variable region light chain; ss; gene; 10-8-3.

XX

OS Homo sapiens.

XX

PN WO2003040170-A2.

XX

PD 15-MAY-2003.

XX

PF 08-NOV-2002; 2002WO-US036107.

XX

PR 09-NOV-2001; 2001US-0348980P.

XX

PA (PFIZ) PFIZER PROD INC.

PA (ABGE-) ABGENIX INC.

XX

PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;

XX

DR WPI; 2003-441521/41.

DR P-PSDB; ADE28413.

XX

PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.

XX

PS Claim 24; SEQ ID NO 19; 177pp; English.

XX

CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody variable region light chain cDNA of the invention.

XX

SQ Sequence 705 BP; 172 A; 201 C; 179 G; 153 T; 0 U; 0 Other;

Query Match 86.1%; Score 361.6; DB 10; Length 705;

Best Local Similarity 92.9%; Pred. No. 2e-103;

Matches	379;	Conservative	0;	Mismatches	29;	Indels	0;	Gaps	0;
Qy	13	ATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAGATGC							72
Db	1	ATGAGGCTCCCTGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCCAGGTTCCAGATGC							60
Qy	73	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCGCATCTGTAGGAGACAGAGTCACC							132
Db	61	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCGCATCTGTAGGAGACAGAGTCACC							120
Qy	133	ATCACTTGTGGCGAGTCAGGA'TATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA							192
Db	121	ATCACTTGTGGCGAGTCAGCCTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCA							180
Qy	193	GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCA							252
Db	181	GGGAAAGCCCCTAAACTCCTGATTATTCTGCCTCCGGTTGCAAAGTGGGTCCCATCA							240
Qy	253	AGGTTCAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT							312
Db	241	AGGTTCAGCGGCAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCT							300
Qy	313	GAAGATTTCGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGGTCAG							372
Db	301	GAAGATTTCGCAACTTACTATTGTCAACAGACTGACAGTTCCCGTCACTTCGGCGC							360
Qy	373	GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC							420
Db	361	GGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC							408

RESULT 14

ADE28428

ID ADE28428 standard; cDNA; 705 BP.

xx

AC ADE28428;

xx

DT 29-JAN-2004 (first entry)

三

DE Human anti-CD40 antibody 21-2-1 variable region light chain cDNA.

XX
KIN

KW anti-CD40 monoclonal antibody; CD40; cytostatic; virucide; antibacterial;
KW immunostimulant; anti-HIV; hyperproliferative; cancer; viral;
KW bacterial infection; immunodeficiency; neutropenia; HIV; gene therapy;
KW human; variable region light chain; ss; gene; 21-2-1.

XX

OS Homo sapiens.

xx

PN WO2003040170-A2 .

88

FD 15 MAY 2005.

PF

xx

PR

XX

PA

PA (ABGE-) ABGENIX INC.
XX
PI Bedian V, Gladue RP, Corvalan J, Jia X, Feng X;
XX
DR WPI; 2003-441521/41.
DR P-PSDB; ADE28429.
XX
PT New chimeric or human monoclonal antibody or its antigen-binding portion
PT that specifically binds to and activates human CD40, useful for enhancing
PT an immune response in a human, or treating cancer, HIV, neutropenia or
PT viral infections.
XX
PS Claim 24; SEQ ID NO 35; 177pp; English.
XX
CC The invention relates to a novel chimeric or human monoclonal antibody or
CC its antigen-binding portion that specifically binds to and activates
CC human CD40. The anti-CD40 antibody of the invention demonstrates
CC cytostatic, virucide, antibacterial, immunostimulant and anti-HIV
CC activities and may be useful for treating a hyperproliferative disorder
CC such as cancer, viral and bacterial infection or genetic, primary or
CC combined immunodeficiency conditions including neutropenia or HIV
CC infection. The anti-CD40 antibodies may also be useful for detecting CD40
CC in a biological sample in vitro or in vivo, as well as during gene
CC therapy procedures. The current sequence is that of the human anti-CD40
CC antibody variable region light chain cDNA of the invention.
XX
SQ Sequence 705 BP; 177 A; 200 C; 175 G; 153 T; 0 U; 0 Other;

Query Match 86.1%; Score 361.6; DB 10; Length 705;
Best Local Similarity 92.9%; Pred. No. 2e-103;
Matches 379; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy 13 ATGATGGTCCCAGCTCAGCTCCTCGTCTCCTGCTCTGGTTCCCAGGTTCCAGATGC 72
Db 1 ATGAGGCTCCCTGCTCAGCTCCTGGGCTCCTGCTCTGGTTCCCAGGTTCCAGATGC 60

Qy 73 GACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCACC 132
Db 61 GACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCACC 120

Qy 133 ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA 192
Db 121 ATCACTTGTGGCGAGTCAGGGTATTACAGCTGGTTAGCCTGGTATCAGCAGAACCA 180

Qy 193 GGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCA 252
Db 181 GGGAAAGCCCTAACCTCCTGATCTACTGCATCCACTTACAAAGTGGGTCCCATCA 240

Qy 253 AGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT 312
Db 241 AGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAACCT 300

Qy 313 GAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTAACATTTCGGCTACACTTTGGTCAG 372
Db 301 GAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACATTTCGGCTACACTTCGGCGGA 360

Qy 373 GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420

Db 361 GGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 408

RESULT 15

AAT73443

ID AAT73443 standard; DNA; 439 BP.

XX

AC AAT73443;

XX

DT 03-DEC-1997 (first entry)

XX

DE Human immunoglobulin light chain variable region partial transcript.

XX

KW Ig; affinity constant; human; antigen; hybridoma; B cell; transgene;

KW transgenic; mouse; CD4; antibody; autoimmune; inflammatory;

KW transplant rejection; ss.

XX

OS Homo sapiens.

XX

PN WO9713852-A1.

XX

PD 17-APR-1997.

XX

PF 10-OCT-1996; 96WO-US016433.

XX

PR 10-OCT-1995; 95US-00544404.

XX

PA (GENP-) GENPHARM INT INC.

XX

PI Lonberg N, Kay RM;

XX

DR WPI; 1997-235888/21.

XX

PT Novel anti-CD4 antibody produced by transgenic mice - used in the

PT treatment of auto-immune disease etc.

XX

PS Claim 44; Page 256; 396pp; English.

XX

CC A novel composition has been developed which comprises an immunoglobulin
CC (Ig) having an affinity constant (Ka) of at least 2 multiply 1000000000 M
CC -1 for binding to a predetermined human antigen. The present sequence
CC represents a human light chain variable region partial nucleotide
CC sequence, 4D1 kappa, which encodes an amino acid sequence from a claimed
CC immunoglobulin that specifically binds human CD4. The anti-CD4 antibodies
CC may be used in therapeutic and diagnostic applications, especially for
CC the treatment of human diseases. These antibodies reduce activity of CD4
CC cells and reduce undesirable autoimmune reactions, inflammatory response
CC and transplant rejection. Transgenic animals are capable of producing
CC heterologous antibodies of multiple isotypes by undergoing isotype
CC switching. These animals produce a first Ig type that is necessary for
CC antigen-stimulated B-cell maturation and can switch to encode and produce
CC one or more subsequent heterologous isotypes

XX

SQ Sequence 439 BP; 100 A; 122 C; 106 G; 111 T; 0 U; 0 Other;

Query Match

85.2%; Score 357.8; DB 2; Length 439;

Search completed: December 2, 2004, 13:06:03
Job time : 326.197 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 61.3429 Seconds
(without alignments)
4866.596 Million cell updates/sec

Title: US-08-728-463B-220
Perfect score: 420
Sequence: 1 AAGCTTGCACCATGATGGT..... TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 824507 seqs, 355394441 residues

Total number of hits satisfying chosen parameters: 1649014

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*5: /cgn2_6/ptodata/1/ina/ PCTUS_COMB.seq:*6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query			Description
		Match	Length	DB	
1	420	100.0	420	3	US-09-042-353-420 Sequence 420, App
2	420	100.0	420	3	US-08-758-417A-220 Sequence 220, App
3	420	100.0	3819	3	US-09-042-353-393 Sequence 393, App
4	420	100.0	3819	3	US-08-758-417A-243 Sequence 243, App
5	368.6	87.8	388	3	US-09-042-353-358 Sequence 358, App
6	368.6	87.8	388	3	US-08-758-417A-206 Sequence 206, App
7	357.8	85.2	439	3	US-09-042-353-360 Sequence 360, App
8	357.8	85.2	439	3	US-08-758-417A-208 Sequence 208, App
9	332.2	79.1	714	4	US-09-472-087-62 Sequence 62, Appl
10	330.6	78.7	1066	1	US-08-157-101A-4 Sequence 4, Appli
11	325.8	77.6	19040	4	US-09-343-485A-3 Sequence 3, Appli
12	323.2	77.0	384	1	US-08-259-372A-13 Sequence 13, Appl
13	323.2	77.0	384	1	US-08-468-671-13 Sequence 13, Appl
14	319.4	76.0	390	2	US-08-646-367-2 Sequence 2, Appli
15	308.8	73.5	705	1	US-08-488-376-16 Sequence 16, Appl
16	308.8	73.5	705	2	US-08-634-223-16 Sequence 16, Appl
17	308.8	73.5	705	2	US-08-634-224-16 Sequence 16, Appl
18	308.8	73.5	705	2	US-08-634-400-16 Sequence 16, Appl
19	308.8	73.5	705	2	US-08-635-878-16 Sequence 16, Appl
20	308.8	73.5	705	2	US-08-770-057-16 Sequence 16, Appl
21	308.8	73.5	705	3	US-09-335-697B-16 Sequence 16, Appl
22	308.8	73.5	705	4	US-09-335-697B-16 Sequence 16, Appl
23	308.8	73.5	705	4	US-09-740-002-16 Sequence 16, Appl
24	302	71.9	387	3	US-08-803-085-3 Sequence 3, Appli
25	295	70.2	990	4	US-09-800-729-79 Sequence 79, Appl
26	294	70.0	387	1	US-08-217-918-1 Sequence 1, Appli
27	282.6	67.3	708	1	US-08-488-376-18 Sequence 18, Appl
28	282.6	67.3	708	2	US-08-634-223-18 Sequence 18, Appl
29	282.6	67.3	708	2	US-08-634-224-18 Sequence 18, Appl
30	282.6	67.3	708	2	US-08-634-400-18 Sequence 18, Appl
31	282.6	67.3	708	2	US-08-635-878-18 Sequence 18, Appl
32	282.6	67.3	708	2	US-08-770-057-18 Sequence 18, Appl
33	282.6	67.3	708	3	US-09-335-697B-18 Sequence 18, Appl
34	282.6	67.3	708	4	US-09-335-697B-18 Sequence 18, Appl

35	282.6	67.3	708	4	US-09-740-002-18	Sequence 18, Appl
36	280.8	66.9	642	1	US-08-157-101A-8	Sequence 8, Appli
37	279.4	66.5	941	4	US-09-800-729-81	Sequence 81, Appl
c 38	276.6	65.9	371	4	US-09-389-681-187	Sequence 187, App
c 39	276.6	65.9	371	4	US-09-620-405B-187	Sequence 187, App
c 40	276.6	65.9	371	4	US-09-339-338-187	Sequence 187, App
c 41	276.6	65.9	371	4	US-09-433-826B-187	Sequence 187, App
c 42	276.6	65.9	371	4	US-09-604-287A-187	Sequence 187, App
c 43	276.6	65.9	371	4	US-09-834-759-187	Sequence 187, App
c 44	276.6	65.9	371	4	US-09-590-751A-187	Sequence 187, App
45	273.8	65.2	411	4	US-09-582-337-23	Sequence 23, Appl

ALIGNMENTS

RESULT 1

US-09-042-353-420

; Sequence 420, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 420:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 420 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA

US-09-042-353-420

Query Match 100.0%; Score 420; DB 3; Length 420;
Best Local Similarity 100.0%; Pred. No. 1.7e-123;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA	60
Db	1	AAGCTTGCACCACATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA	60

Qy 61 GGTTCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGA 120
Db 61 GGTTCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGA 120

Qy 121 GACAGAGTCACCACACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTAT 180
Db 121 GACAGAGTCACCACACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTAT 180

Qy 181 CAGCATAAACCAAGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 240
Db 181 CAGCATAAACCAAGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGT 240

Qy 241 GGTGTCCCATCAAGGTTAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGC 300
Db 241 GGTGTCCCATCAAGGTTAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGC 300

Qy 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTAC 360
Db 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTAC 360

Qy 361 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 361 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420

RESULT 2

US-08-758-417A-220

; Sequence 220, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils
; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

;
; FILING DATE: 07-DEC-1994
; APPLICATION NUMBER: US 08/209,741
;
; FILING DATE: 09-MAR-1994
; APPLICATION NUMBER: US 08/165,699
;
; FILING DATE: 10-DEC-1993
; APPLICATION NUMBER: US 08/161,739
;
; FILING DATE: 03-DEC-1993
; APPLICATION NUMBER: US 08/155,301
;
; FILING DATE: 18-NOV-1993
; APPLICATION NUMBER: US 08/096,762
;
; FILING DATE: 22-JUL-1993
; APPLICATION NUMBER: US 08/053,131
;
; FILING DATE: 26-APR-1993
; APPLICATION NUMBER: US 07/990,860
;
; FILING DATE: 16-DEC-1992
;
ATTORNEY/AGENT INFORMATION:
;
; NAME: Serafini, Andrew T.
;
; REGISTRATION NUMBER: 41,303
;
; REFERENCE/DOCKET NUMBER: 014643-009030US
;
TELECOMMUNICATION INFORMATION:
;
; TELEPHONE: (415) 576-0200
;
; TELEFAX: (415) 576-0300
;
INFORMATION FOR SEQ ID NO: 220:
;
SEQUENCE CHARACTERISTICS:
;
; LENGTH: 420 base pairs
;
; TYPE: nucleic acid
;
; STRANDEDNESS: single
;
; TOPOLOGY: linear
;
; MOLECULE TYPE: DNA
;
SEQUENCE DESCRIPTION: SEQ ID NO: 220:
US-08-758-417A-220

Query Match 100.0%; Score 420; DB 3; Length 420;
Best Local Similarity 100.0%; Pred. No. 1.7e-123;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA 60
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1 AAGCTTGCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCCA 60
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGA 120
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGA 120
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 181 CAGCATAAACCAAGGTAAAGCACCTAACGCTAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 240
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 181 CAGCATAAACCAAGGTAAAGCACCTAACGCTAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGT 240
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 241 GGTGTCCCACATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACACTCACCACAGC 300
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 241 GGTGTCCCACATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACACTCACCACAGC 300
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 301 AGCCTGCAGCCTGAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTAC 360

Db 301 AGCCTGCAGCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTAC 360
Qy 361 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420
Db 361 ACTTTGGTCAGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420

RESULT 3

US-09-042-353-393

; Sequence 393, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 421

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/042,353

; FILING DATE: 13-MAR-1998

; CLASSIFICATION: 800

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/810,279

; FILING DATE: 17-DEC-1991

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/853,408

; FILING DATE: 18-MAR-1992

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/904,068

; FILING DATE: 23-JUN-1992

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 393:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3819 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-042-353-393

Query Match 100.0%; Score 420; DB 3; Length 3819;
Best Local Similarity 100.0%; Pred. No. 3.9e-123;
Matches 420; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCA 60
Db 2434 AAGCTTGCCACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCA 2493
Qy 61 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 120
Db 2494 GGTTCCAGATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGA 2553
Qy 121 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 180
Db 2554 GACAGAGTCACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTAT 2613

RESULT 4

US-08-758-417A-243

; Sequence 243, Application US/08758417A

Patent No. 6300129

GENERAL INFORMATION:

APPLICANT: Lonberg, Nils
; Kay, Robert M

TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for Producing Heterologous Antibodies

NUMBER OF SEQUENCES: 417

NUMBER OF SEQUENCES: _____

ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834

COMPUTER READABLE FORM

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/758,417A
FILING DATE: 02-Dec-1996
CLASSIFICATION: <Unknown>

CLASSIFICATION: U

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996

FILING DATE: 10-OCT-1996
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995

FILED DATE: 10-OCT-1993
APPLICATION NUMBER: US 08/352,322
FILED DATE: 07-DEC-1994

1 FILING DATE: 07-DEC-1994
1 APPLICATION NUMBER: US 08/209,741
1 FILING DATE: 09-MAR-1994

APPLICATION NUMBER: US 08/165,699
FILING DATE: 10-DEC-1993

APPLICATION NUMBER: US 08/161,739
FILING DATE: 03-DEC-1993

FILED DATE: 05 DEC 1996
APPLICATION NUMBER: US 08/155,301

FILING DATE: 18-NOV-1993
APPLICATION NUMBER: US 08/096,762
FILING DATE: 22-JUL-1993
APPLICATION NUMBER: US 08/053,131
FILING DATE: 26-APR-1993
APPLICATION NUMBER: US 07/990,860
FILING DATE: 16-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014643-009030US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300

FORMATION FOR SEQ ID NO: 243:

SEQUENCE CHARACTERISTICS:

LENGTH: 3819 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: DNA

SEQUENCE DESCRIPTION: SEQ ID NO: 243:

US-08-758-417A-243

RESULT 5
US-09-042-353-358
; Sequence 358, Application US/09042353
; Patent No. 6255458
; GENERAL INFORMATION:
; APPLICANT: Lonberg, Nils
; APPLICANT: Kay, Robert M.
; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for
; TITLE OF INVENTION: Producing Heterologous Antibodies
; NUMBER OF SEQUENCES: 421
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/042,353
; FILING DATE: 13-MAR-1998
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/810,279
; FILING DATE: 17-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,408
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/904,068
; FILING DATE: 23-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/544,404
FILING DATE: 10-OCT-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US96/16433
FILING DATE: 10-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/758,417
FILING DATE: 02-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US97/21803
FILING DATE: 01-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Apple, Randolph T.
REGISTRATION NUMBER: 36,429
REFERENCE/DOCKET NUMBER: 014643-009040US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 358:
SEQUENCE CHARACTERISTICS:
LENGTH: 388 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA

US-09-042-353-358

Query Match 87.8%; Score 368.6; DB 3; Length 388;
Best Local Similarity 97.7%; Pred. No. 3.1e-107;
Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAGATG	71
Db	6	CATGATGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCAGGTTCCAGATG	65
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTTAGGAGACAGAGTCAC	131
Db	66	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTTAGGAGACAGAGTCAC	125
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	126	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	185
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	251
Db	186	AGGGAAAGCCCCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	245
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	246	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	305

Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTACACTTTGGTCA	371
Db	306	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTACACTTTGGCCA	365
Qy	372	GGGAACCAAGCTGGAGATCAAAC	394
Db	366	GGGGACCAAGCTGGAGATCAAAC	388

RESULT 6

US-08-758-417A-206

; Sequence 206, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils
; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A
; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993

; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993

; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993

; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992

; ATTORNEY/AGENT INFORMATION:

NAME: Serafini, Andrew T.
REGISTRATION NUMBER: 41,303
REFERENCE/DOCKET NUMBER: 014643-009030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 206:
SEQUENCE CHARACTERISTICS:
LENGTH: 388 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 206:
US-08-758-417A-206

Query Match 87.8%; Score 368.6; DB 3; Length 388;
Best Local Similarity 97.7%; Pred. No. 3.1e-107;
Matches 374; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATG 71
Db 6 CATGATGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCAGGTTCCAGATG 65

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGAGGAGACAGAGTCAC 131
Db 66 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGAGGAGACAGAGTCAC 125

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
Db 126 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 185

Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCATC 251
Db 186 AGGGAAAGCCCCAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCATC 245

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 246 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 305

Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA 371
Db 306 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGCCA 365

Qy 372 GGGAACCAAGCTGGAGATCAAAC 394
Db 366 GGGAACCAAGCTGGAGATCAAAC 388

RESULT 7

US-09-042-353-360

; Sequence 360, Application US/09042353

; Patent No. 6255458

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; APPLICANT: Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6255458-Human Animals for

; TITLE OF INVENTION: Producing Heterologous Antibodies
; NUMBER OF SEQUENCES: 421
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/042,353
; FILING DATE: 13-MAR-1998
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/810,279
; FILING DATE: 17-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/853,408
; FILING DATE: 18-MAR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/904,068
; FILING DATE: 23-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/990,860
; FILING DATE: 16-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/053,131
; FILING DATE: 26-APR-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/096,762
; FILING DATE: 22-JUL-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/155,301
; FILING DATE: 18-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,739
; FILING DATE: 03-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/165,699
; FILING DATE: 10-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,741
; FILING DATE: 09-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/352,322
; FILING DATE: 07-DEC-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/544,404
; FILING DATE: 10-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/728,463
; FILING DATE: 10-OCT-1996

;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US96/16433
; FILING DATE: 10-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/758,417
; FILING DATE: 02-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/21803
; FILING DATE: 01-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 014643-009040US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 360:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 439 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA

US-09-042-353-360

Query Match 85.2%; Score 357.8; DB 3; Length 439;
Best Local Similarity 92.2%; Pred. No. 8.7e-104;
Matches 377; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGATG	71
Db	6	CATGGAGTCCCCGTTAGCTCCTGGGGCTCTGCTGCTCTGGTCCAGATG	65
Qy	72	CGACATCCAGATGACCCAGTCCTCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC	131
Db	66	TGACATCCAGATGACCCAGTCCTCATCCTACTGTGTCATCTGTAGGAGACAGAGTCAC	125
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Db	126	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC	185
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCATC	251
Db	186	AGAGAAAGCCCCCTAACGCTCCTGATCTATTCTGCATCCAGTTGCAAAGTGGGTCCATC	245
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTACCATCAGCAGCCTGCAGCC	311
Db	246	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTACCATCAGCAGCCTGCAGCC	305
Qy	312	TGAAGATTTGCAACTTACTATTGTCACACAGGCTAATAGTTCCCGTACACTTTGGTCA	371
Db	306	TGAAGATTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTGGCCA	365
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	366	GGGGACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	414

RESULT 8

US-08-758-417A-208

; Sequence 208, Application US/08758417A

; Patent No. 6300129

; GENERAL INFORMATION:

; APPLICANT: Lonberg, Nils

; Kay, Robert M.

; TITLE OF INVENTION: Transgenic No. 6300129-Human Animals for
; Producing Heterologous Antibodies

; NUMBER OF SEQUENCES: 417

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/758,417A

; FILING DATE: 02-Dec-1996

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/728,463

; FILING DATE: 10-OCT-1996

; APPLICATION NUMBER: US 08/544,404

; FILING DATE: 10-OCT-1995

; APPLICATION NUMBER: US 08/352,322

; FILING DATE: 07-DEC-1994

; APPLICATION NUMBER: US 08/209,741

; FILING DATE: 09-MAR-1994

; APPLICATION NUMBER: US 08/165,699

; FILING DATE: 10-DEC-1993

; APPLICATION NUMBER: US 08/161,739

; FILING DATE: 03-DEC-1993

; APPLICATION NUMBER: US 08/155,301

; FILING DATE: 18-NOV-1993

; APPLICATION NUMBER: US 08/096,762

; FILING DATE: 22-JUL-1993

; APPLICATION NUMBER: US 08/053,131

; FILING DATE: 26-APR-1993

; APPLICATION NUMBER: US 07/990,860

; FILING DATE: 16-DEC-1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Serafini, Andrew T.

; REGISTRATION NUMBER: 41,303

; REFERENCE/DOCKET NUMBER: 014643-009030US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 576-0200

; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 208:

; SEQUENCE CHARACTERISTICS:

;
; LENGTH: 439 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 208:
US-08-758-417A-208

Query Match 85.2%; Score 357.8; DB 3; Length 439;
Best Local Similarity 92.2%; Pred. No. 8.7e-104;
Matches 377; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 6 CATGGAGTTCCCCGTTCAGCTCCTGGGCTCCTGCTCTGTTCCCAGGTGCCAGATG 65
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 72 CGACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 66 TGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCAC 125
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 132 CATCACTTGTGGCGAGTCAGGGATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 126 CATCACTTGTGGCGAGTCAGGGATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 185
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 186 AGAGAAAGCCCCTAAGTCCCTGATCTATTCTGCATCCAGTTGCAAAGTGGGTCCCATC 245
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 246 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 305
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 312 TGAAGATTTGCAACTTACTATTGCAACAGGCTAATAGTTCCGTACACTTTGGTCA 371
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 306 TGAAGATTTGCAACTTATTACTGCCAACAGTATGATAGTTACCCGTACACTTTGCCA 365
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 372 GGGACCAGCTGGAGATCAAACGAACTGTGGCTGCACCCTGTCTTC 420
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 366 GGGACCAGCTGGAGATCAAACGAACTGTGGCTGCACCCTGTCTTC 414
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

RESULT 9

US-09-472-087-62

; Sequence 62, Application US/09472087
; Patent No. 6682736
; GENERAL INFORMATION:
; APPLICANT: HANSON, DOUGLAS C.
; APPLICANT: NEVEU, MARK J.
; APPLICANT: MUELLER, EILLEN E.
; APPLICANT: HANKE, JEFFREY H.
; APPLICANT: GILMAN, STEVEN C.
; APPLICANT: DAVIS, C. GEOFFREY
; APPLICANT: CORVALAN, JOSE R.
; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES TO CTLA-4
; FILE REFERENCE: ABX-PF1
; CURRENT APPLICATION NUMBER: US/09/472,087
; CURRENT FILING DATE: 1999-12-23

; PRIOR APPLICATION NUMBER: 60/113,647
; PRIOR FILING DATE: 1998-12-23
; NUMBER OF SEQ ID NOS: 147
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 62
; LENGTH: 714
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-472-087-62

Query Match 79.1%; Score 332.2; DB 4; Length 714;
Best Local Similarity 88.3%; Pred. No. 1.4e-95;
Matches 361; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATG 71
Db 6 CATGAGGGTCCCGCTCAGCTCCTGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATG 65

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
Db 66 TGACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAC 125

Qy 132 CATCACTTGTCGGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
Db 126 CATCACTTGCCTGGCAAGTCAGAGCATTAACAGCTATTAGATTGGTATCAGCAGAAACC 185

Qy 192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
Db 186 AGGGAAAGCCCCTAAACTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC 245

Qy 252 AAGGTTCAAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 246 AAGGTTCACTGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGTCTGCAACC 305

Qy 312 TGAAGATTTGCAACTTACTATTGTCACAGGCTAATAGTTCCGTACACTTTGGTCA 371
Db 306 TGAAGATTTGCAACTTACTACTGTCACAGTATTACAGTACTCCATTCACTTCGGCCC 365

Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 366 TGGGACCAAAAGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC 414

RESULT 10

US-08-157-101A-4

; Sequence 4, Application US/08157101A
; Patent No. 5808032
; GENERAL INFORMATION:
; APPLICANT: KURIHARA, TATSUYA
; APPLICANT: MATSUKURA, SHIGEKAZU
; APPLICANT: TSURUOKA, NOBUO
; APPLICANT: ARIMA, KENJI
; APPLICANT: NISHIHARA, TATSURO
; TITLE OF INVENTION: ANTI-HBS ANTIBODY GENES AND EXPRESSION
; TITLE OF INVENTION: PLASMIDS THEREFOR
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:

ADDRESSEE: PILLSBURY, MADISON & SUTRO
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/157,101A
FILING DATE: 05-APR-1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: TITUS, MARLANA K
REGISTRATION NUMBER: 35843
REFERENCE/DOCKET NUMBER: 9437/204199
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUCH
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 1066 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)

US-08-157-101A-4

Db 338 TGAAGATTTGCAACCTTATTACTGTCTACATCATAATAATTACCCGCTAAGTTCGCGG 397
Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 398 AGGGACCAACGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 446

RESULT 11

US-09-343-485A-3

; Sequence 3, Application US/09343485A
; Patent No. 6413777
; GENERAL INFORMATION:
; APPLICANT: REFF, MITCHELL R.
; APPLICANT: BARNETT, RICHARD S.
; APPLICANT: MCLACHLAN, KAREN R.
; TITLE OF INVENTION: NOVEL METHOD FOR INTEGRATING GENES AT SPECIFIC SITES IN
; TITLE OF INVENTION: MAMMALIAN CELLS VIA HOMOLOGOUS RECOMBINATION AND
; TITLE OF INVENTION: VECTORS FOR ACCOMPLISHING THE SAME
; FILE REFERENCE: 037003-0275807
; CURRENT APPLICATION NUMBER: US/09/343,485A
; CURRENT FILING DATE: 1999-06-30
; PRIOR APPLICATION NUMBER: 09/023,715
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: 08/819,866
; PRIOR FILING DATE: 1997-03-14
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 19040
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
; OTHER INFORMATION: referred to as "Mandy"

US-09-343-485A-3

Query Match 77.6%; Score 325.8; DB 4; Length 19040;
Best Local Similarity 87.3%; Pred. No. 5.2e-93;
Matches 357; Conservative 0; Mismatches 52; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 71
Db 7550 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTCTGCTCTGGCTCCCAGGTGCCAGATG 7609
Qy 72 CGACATCCAGATGACCCAGTCTCCATCTCCGTGTCATCTGTAGGAGACAGAGTCAC 131
Db 7610 TGACATCCAGATGACCCAGTCTCCATCTCCCTGTGTCATCTGTAGGGGACAGAGTCAC 7669
Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAAC 191
Db 7670 CATCACTTGCAGGGCAAGTCAGGACATTAGGTATTATTAAATTGGTATCAGCAGAAC 7729
Qy 192 AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC 251
Db 7730 AGGAAAAGCTCCTAACGCTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 7789

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 7790 ||||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 312 TGAAGAGTTTGCACCTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA 371
Db 7850 TGAAGAGTTTGCACCTTACTATTGTCTACAGGTTATAGTACCCCTCGGACGTTCGGCCA 7909
Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 7910 AGGGACCAAGGTGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTC 7958

RESULT 12

US-08-259-372A-13

; Sequence 13, Application US/08259372A

; Patent No. 5565354

; GENERAL INFORMATION:

; APPLICANT: Ostberg, Lars G.

; TITLE OF INVENTION: PRODUCTION OF HUMAN MONOCLONAL

; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR HEPATITIS B SURFACE ANTIGEN

; NUMBER OF SEQUENCES: 16

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/259,372A

; FILING DATE: 14-JUN-1994

; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/871,426

; FILING DATE: 21-APR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/676,036

; FILING DATE: 27-MAR-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/538,796

; FILING DATE: 15-JUN-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/192,754

; FILING DATE: 11-MAY-1988

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 06/925,196

; FILING DATE: 31-OCT-1986

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 06/904,517

; FILING DATE: 05-SEP-1986

; ATTORNEY/AGENT INFORMATION:

NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 11823-50-7
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 384 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
CELL TYPE: Hybridoma
CELL LINE: ZM1-2
FEATURE:
NAME/KEY: CDS
LOCATION: 1..384

US-08-259-372A-13

Query Match 77.0%; Score 323.2; DB 1; Length 384;
Best Local Similarity 90.1%; Pred. No. 7.6e-93;
Matches 346; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

Qy	13	ATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTTCCAGGTTCCAGATGC	72
Db	1	ATGAGGCCCGTCGCTCAGCTCCTGGGCTCCTGCTCTGGTTCCAGGTTCCAGATGC	60
Qy	73	GACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCACC	132
Db	61	GACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTGGAGACAGAGTCACC	120
Qy	133	ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA	192
Db	121	GTCACTTGTGGCGAGTCAGGTATTAGCAGTTGGTTAGCCTGGTATCAGCAGAACCA	180
Qy	193	GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCATCA	252
Db	181	GGGAAAGCCCCTAACCTCCTGATCCATGCTGCATCCAGTTGCAAAGTGGGTCCATCA	240
Qy	253	AGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT	312
Db	241	AGGTTCATCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGGCT	300
Qy	313	GAAGATTTCACCTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCAG	372
Db	301	GAAGATTTCACCTACTATTGTCAACAGGCTGACAGTCTCCCTTTACTTCGGCGGA	360
Qy	373	GGAACCAAGCTGGAGATCAAACGA	396
Db	361	GGGACCAAGGTGGACTTCAAACGA	384

RESULT 13

US-08-468-671-13

; Sequence 13, Application US/08468671

; Patent No. 5648077

; GENERAL INFORMATION:

; APPLICANT: Ostberg, Lars G.

; TITLE OF INVENTION: PRODUCTION OF HUMAN MONOCLONAL

; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR HEPATITIS B SURFACE ANTIGEN

; NUMBER OF SEQUENCES: 16

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/468,671

; FILING DATE: 06-JUN-1995

; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/259,372

; FILING DATE: 14-JUN-1994

; APPLICATION NUMBER: US 07/871,426

; FILING DATE: 21-APR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/676,036

; FILING DATE: 27-MAR-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/538,796

; FILING DATE: 15-JUN-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/192,754

; FILING DATE: 11-MAY-1988

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 06/925,196

; FILING DATE: 31-OCT-1986

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 06/904,517

; FILING DATE: 05-SEP-1986

; ATTORNEY/AGENT INFORMATION:

; NAME: Smith, William M.

; REGISTRATION NUMBER: 30,223

; REFERENCE/DOCKET NUMBER: 11823-50-7

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 326-2400

; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 13:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 384 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: unknown

TOPOLOGY: unknown
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
CELL TYPE: Hybridoma
CELL LINE: ZM1-2
FEATURE:
NAME/KEY: CDS
LOCATION: 1..384

US-08-468-671-13

RESULT 14

US-08-646-367-2

Sequence 2, Application US/08646367

Patent No. 5959085

GENERAL INFORMATION

APPLICANT: Pierre Garrone

APPLICANT: Odile Biassou

APPLICANT: Francois Fossiez

APPLICANT: Francois Tessier

ATTORNEY: Jacques Banchereau
TITLE OF INVENTION: Human Monoclonal Antibodies

TITLE OF INVENTION: Methods Of Making And Using Such Antibodies
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schering-Plough Corporation
STREET: 2000 Galloping Hill Road
CITY: Kenilworth
STATE: New Jersey
COUNTRY: USA
ZIP: 07033
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.5.3
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/646,367
FILING DATE: May 16, 1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Foulke, Cynthia L.
REGISTRATION NUMBER: 32,364
REFERENCE/DOCKET NUMBER: SF0403K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-298-2987
TELEFAX: 908-298-5388
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
US-08-646-367-2

Qy 312 TGAAGAGTTTGCAACTTACTATTGTCAACAGGGCTAATAGTTCCCGTACACTTTGGTCA 371
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 306 TGAAGAGTTTGCAACTTATTATTGTCAACAGACTAGCAGTTCTCCTCAGTTTCGGCGG 365
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 372 GGGAACCAAGCTGGAGATCAAACGA 396
||| ||| ||| ||| ||| |||
Db 366 CGGGACCAAGGTGGAGCACAAACGA 390

RESULT 15

US-08-488-376-16

; Sequence 16, Application US/08488376

; Patent No. 5811524

; GENERAL INFORMATION:

; APPLICANT: BRAMS, Peter

; APPLICANT: CHAMAT, Soulaima Salim

; APPLICANT: PAN, Li-Zhen

; APPLICANT: WALSH, Edward E.

; APPLICANT: HEARD, Cheryl Janne

; APPLICANT: NEWMAN, Roland Anthony

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN

; TITLE OF INVENTION: MONOCLONAL ANTIBODIES SPECIFIC TO RSV F-PROTEIN AND

; TITLE OF INVENTION: METHODS FOR THEIR MANUFACTURE AND THERAPEUTIC USE

THEREOF

; NUMBER OF SEQUENCES: 19

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Burns, Doane, Swecker & Mathis

; STREET: P.O. Box 1404

; CITY: Alexandria

; STATE: Virginia

; COUNTRY: United States

; ZIP: 22313-1404

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/488,376

; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:

; NAME: Teskin, Robin L.

; REGISTRATION NUMBER: 35,030

; REFERENCE/DOCKET NUMBER: 012712-150

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (703) 836-6620

; TELEFAX: (703) 836-2021

; INFORMATION FOR SEQ ID NO: 16:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 705 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..705

US-08-488-376-16

Query Match 73.5%; Score 308.8; DB 1; Length 705;
Best Local Similarity 84.8%; Pred. No. 3.5e-88;
Matches 346; Conservative 0; Mismatches 62; Indels 0; Gaps 0;

Qy 13 ATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATGC 72
Db 1 ATGGAGACCCCTGCTCAGCTCCTGGGCTCCTGCTACTCTGGCTCCGAGGTGCCAGATGT 60

Qy 73 GACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCACC 132
Db 61 GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACC 120

Qy 133 ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA 192
Db 121 ATCACTTGCCTGGCAGGTCAAGGAGATTGCTAGTTATTAAATTGGTATCAGCACAAACCA 180

Qy 193 GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCATCA 252
Db 181 GGGAAAGCCCCTAAGCTCCTGATATATGCTGGATCCAATTGCACCGTGGGTCCGTCA 240

Qy 253 AGGTTCAAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT 312
Db 241 AGGTTCAAGTGGCGGTGGATCTGGACAGATTCACTCTCACCATCAACAGTCTGCAACCT 300

Qy 313 GAAGATTTCGAACCTACTATTGTAACAGGCTAACAGTTCCGTACACTTTGGTCAG 372
Db 301 GAAGATTTCGAACCTACTATTGTAACAGGCTTACAGTACCCCTGGACTTCGGCCCA 360

Qy 373 GGAACCAAGCTGGAGATCAAACGAACACTGTGGCTGCACCATCTGTCTTC 420
Db 361 GGGACCAAGGTGGAAATCAAACGTACGGTGGCTGCACCATCTGTCTTC 408

Search completed: December 2, 2004, 17:07:49

Job time : 62.3429 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 17:01:26 ; Search time 322.011 Seconds
(without alignments)
7166.911 Million cell updates/sec

Title: US-08-728-463B-220
Perfect score: 420
Sequence: 1 AAGCTTGCCACCATGATGGT.....TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3694831 seqs, 2747406616 residues

Total number of hits satisfying chosen parameters: 7389662

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*18: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*19: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:*20: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*21: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Query					Description
	No.	Score	Match	Length	DB	
					ID	
	1	370.6	88.2	974	9	US-09-859-053-29
	2	370.6	88.2	974	17	US-10-625-105-29
	3	365.8	87.1	728	9	US-09-844-684-15
	4	365.8	87.1	728	14	US-10-040-244-15
	5	365.8	87.1	728	17	US-10-693-629-65
	6	362.6	86.3	716	9	US-09-844-684-13
	7	362.6	86.3	716	14	US-10-040-244-13
	8	361.6	86.1	705	15	US-10-292-088-23
	9	361.6	86.1	705	15	US-10-292-088-47
	10	361.6	86.1	752	17	US-10-684-109-83
c	11	361.6	86.1	752	17	US-10-684-109-84
	12	346.4	82.5	463	16	US-10-395-894-24
	13	346.4	82.5	463	17	US-10-695-667-24
	14	346.4	82.5	6082	16	US-10-395-894-10
	15	346.4	82.5	6082	17	US-10-695-667-10

16	344	81.9	702	17	US-10-684-109-107	Sequence 107, App
c 17	344	81.9	702	17	US-10-684-109-108	Sequence 108, App
18	342.4	81.5	702	17	US-10-684-109-89	Sequence 89, Appl
c 19	342.4	81.5	702	17	US-10-684-109-90	Sequence 90, Appl
20	338.6	80.6	1106	16	US-10-264-049-121	Sequence 121, App
21	338.4	80.6	463	16	US-10-395-894-20	Sequence 20, Appl
22	338.4	80.6	463	17	US-10-695-667-20	Sequence 20, Appl
23	338.4	80.6	6082	16	US-10-395-894-9	Sequence 9, Appl
24	338.4	80.6	6082	17	US-10-695-667-9	Sequence 9, Appl
25	336	80.0	702	17	US-10-684-109-101	Sequence 101, App
c 26	336	80.0	702	17	US-10-684-109-102	Sequence 102, App
27	335.2	79.8	729	15	US-10-216-484-125	Sequence 125, App
28	335.2	79.8	729	15	US-10-384-933-125	Sequence 125, App
29	334.4	79.6	702	17	US-10-684-109-113	Sequence 113, App
c 30	334.4	79.6	702	17	US-10-684-109-114	Sequence 114, App
31	332.8	79.2	702	17	US-10-684-109-95	Sequence 95, Appl
c 32	332.8	79.2	702	17	US-10-684-109-96	Sequence 96, Appl
33	332.2	79.1	714	14	US-10-153-382-18	Sequence 18, Appl
34	332.2	79.1	714	18	US-10-612-497-62	Sequence 62, Appl
35	332.2	79.1	714	18	US-10-776-649-62	Sequence 62, Appl
36	330.6	78.7	490	10	US-09-918-995-37859	Sequence 37859, A
37	328	78.1	381	16	US-10-309-762-111	Sequence 111, App
38	326.6	77.8	591	16	US-10-264-049-2157	Sequence 2157, Ap
39	325.8	77.6	19040	17	US-10-817-950-3	Sequence 3, Appl
40	324.2	77.2	514	14	US-10-066-543-2025	Sequence 2025, Ap
c 41	324.2	77.2	537	14	US-10-066-543-186	Sequence 186, App
42	324.2	77.2	698	9	US-09-844-684-11	Sequence 11, Appl
43	324.2	77.2	698	14	US-10-040-244-11	Sequence 11, Appl
44	324.2	77.2	698	17	US-10-693-629-61	Sequence 61, Appl
45	323.2	77.0	384	15	US-10-389-221-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
 US-09-859-053-29
 ; Sequence 29, Application US/09859053
 ; Patent No. US20020102658A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Tsuji, Takashi
 ; APPLICANT: Tezuka, Katsunari
 ; APPLICANT: Hori, No. US20020102658A1uaki
 ; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODY AGAINST A
 ; TITLE OF INVENTION: COSTIMULATORY SIGNAL TRANSDUCTION MOLECULE AILIM AND
 ; TITLE OF INVENTION: PHARMACEUTICAL USE THEREOF
 ; FILE REFERENCE: 06501-079001
 ; CURRENT APPLICATION NUMBER: US/09/859,053
 ; CURRENT FILING DATE: 2001-05-16
 ; PRIOR APPLICATION NUMBER: JP 2001-99508
 ; PRIOR FILING DATE: 2001-03-30
 ; PRIOR APPLICATION NUMBER: JP 2000-147116
 ; PRIOR FILING DATE: 2000-05-18
 ; NUMBER OF SEQ ID NOS: 43
 ; SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 29
 ; LENGTH: 974

; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: 5'UTR
; LOCATION: (1) ... (38)
; NAME/KEY: CDS
; LOCATION: (39) ... (746)
; NAME/KEY: 3'UTR
; LOCATION: (750) ... (974)
; NAME/KEY: sig_peptide
; LOCATION: (39) ... (104)

US-09-859-053-29

Query Match 88.2%; Score 370.6; DB 9; Length 974;
Best Local Similarity 94.1%; Pred. No. 2e-108;
Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCTGGTCCCAGGTTCCAGATG 71
Db 44 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCTGGTCCCAGGTTCCAGATG 103

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC 131
Db 104 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC 163

Qy 132 CATCACTTGTGGCGAGTCAGGATAATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
Db 164 CATCACTTGTGGCGAGTCAGGGTATTAGCAGGGTGGTACAGCAGAAACC 223

Qy 192 AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
Db 224 AGGGAAAGCCCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 283

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 284 AAGGTTCAGCGGCAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC 343

Qy 312 TGAAGAGTTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA 371
Db 344 TGAAGAGTTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTGGACGTTGGCCA 403

Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 404 AGGGACCAAGGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC 452

RESULT 2

US-10-625-105-29

; Sequence 29, Application US/10625105

; Publication No. US20040180052A1

; GENERAL INFORMATION:

; APPLICANT: Tsuji, Takashi

; APPLICANT: Tezuka, Katsunari

; APPLICANT: Hori, Nobuaki

; TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODY AGAINST A

; TITLE OF INVENTION: COSTIMULATORY SIGNAL TRANSDUCTION MOLECULE AILIM AND

; TITLE OF INVENTION: PHARMACEUTICAL USE THEREOF

; FILE REFERENCE: 06501-079001
; CURRENT APPLICATION NUMBER: US/10/625,105
; CURRENT FILING DATE: 2003-07-22
; PRIOR APPLICATION NUMBER: US/09/859,053
; PRIOR FILING DATE: 2001-05-16
; PRIOR APPLICATION NUMBER: JP 2001-99508
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: JP 2000-147116
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 29
; LENGTH: 974
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: 5'UTR
; LOCATION: (1) ... (38)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (39) ... (746)
; FEATURE:
; NAME/KEY: 3'UTR
; LOCATION: (750) ... (974)
; FEATURE:
; NAME/KEY: sig_peptide
; LOCATION: (39) ... (104)

US-10-625-105-29

Query Match 88.2%; Score 370.6; DB 17; Length 974;
Best Local Similarity 94.1%; Pred. No. 2e-108;
Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG	71
Db	44		CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 103
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	131
Db	104		CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 163
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	164		CATCACTTGTGGCGAGTCAGGGTATTAGCAGGTTAGCCTGGTATCAGCAGAAACC 223
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	224		AGGGAAAGCCCTAAACTCCTGATCTATGTTGCATCCAGTTGCAAAGTGGGTCCCATC 283
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	284		AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 343
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTGTACACTTTGGTCA	371
Db	344		TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTGTACACTTTGGACGTTCGGCCA 403

Qy	372	GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420
Db	404	AGGGACCAAGGTGGAAATCAAACGAACTGTGGCTGCACCATCTGTCTTC	452

RESULT 3

US-09-844-684-15

; Sequence 15, Application US/09844684

; Patent No. US20020142358A1

GENERAL INFORMATION:

; APPLICANT: GEMINI SCIENCE, INC.

APPLICANT: LA JOLLA INSTITUTE FOR ALLERGY AND IMMUNOLOGY

TITLE OF INVENTION: HUMAN ANTI-CD40 ANTIBODIES AND METHODS OF MAKING SAME

; FILE REFERENCE: 21286/0276339

; CURRENT APPLICATION NUMBER: US/09/844,684

; CURRENT FILING DATE: 2001-04-27

; PRIOR APPLICATION NUMBER: US 60/200,601

PRIOR FILING DATE: 2000-04-28

; NUMBER OF SEQ ID NOS: 15

SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 15

; LENGTH: 728

; TYPE: DNA

ORGANISM: *Homo sapiens*

$$US = 0.9 - 84.4 - 68.4 = 1.5$$

Query Match 87.1%; Score 365.8; DB 9; Length 728;
Best Local Similarity 93.4%; Pred. No. 6.4e-107;
Matches 382; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

QY 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCCTGCTCTGGTTCCAGGTTCCAGATG 71
||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
||||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 312 TGAAGATTGCAACTTACTATTGTCAACAGGCTAATAGTTCCCGTACACTTTGGTCA 371
|||||||||||||||||||||||||||||||||||||||||||||||

Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
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RESULT 4

US-10-040-244-15

; Sequence 15, Application US/10040244

; Publication No. US20030059427A1

; GENERAL INFORMATION:

; APPLICANT: KIRIN BEER KABUSHIKI KAISHA

; APPLICANT: FORCE, WALKER F.

; APPLICANT: TAKAHASHI, NOBUAKI

; APPLICANT: MIKAYAMA, TOSHIKUMI

; TITLE OF INVENTION: ISOLATION AND CHARACTERIZATION OF HIGHLY ACTIVE ANTI-CD40
ANTIBODY

; FILE REFERENCE: 021286/0272501

; CURRENT APPLICATION NUMBER: US/10/040,244

; CURRENT FILING DATE: 2002-06-17

; PRIOR APPLICATION NUMBER: 60/200,601

; PRIOR FILING DATE: 2000-4-28

; PRIOR APPLICATION NUMBER: PCT/US01/13672

; PRIOR FILING DATE: 2001-04-27

; PRIOR APPLICATION NUMBER: 09/844,684

; PRIOR FILING DATE: 2001-04-27

; NUMBER OF SEQ ID NOS: 17

; SOFTWARE: PatentIn Ver. 3.0

; SEQ ID NO 15

; LENGTH: 728

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-040-244-15

Query Match 87.1%; Score 365.8; DB 14; Length 728;
Best Local Similarity 93.4%; Pred. No. 6.4e-107;
Matches 382; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 64 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG 123

Qy 72 CGACATCCAGATGACCCAGTCTCCATTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 124 CGACATCCAGATGACCCAGTCTCCATTTCCGTCTGGATCTGTAGGAGACAGAGTCAC 183

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 184 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACC 243

Qy 192 AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCATC 251
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 244 AGGGAAAGCCCCTAACGCTCTGATCTATGCTGGATCCAGTTGCAAAGTGGGTCCATC 303

Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 304 AAGGTTCAGCGGAAGTGGATTTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 363

Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAATAGTTCCCGTACACTTTGGTCA 371
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 364 TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAGCAGTTCCCTCGGACATTGGCCA 423

Db	244	AGGGAAAGCCCCTAACGCTCCTGATCTATGCTGGATCCAGTTGCAAAGTGGGTCCCATC	303
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCC	311
Db	304	AAGGTTCAGCGGCAGTGGATTGGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCC	363
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTAACAGGCTAAC	371
Db	364	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTAACAGGCTAAC	423
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC	420
Db	424	AGGGACCAAGGTGGAGATCAAACGTACGGTGGCTGCACCATCTGTCTTC	472

RESULT 6

US-09-844-684-13

; Sequence 13, Application US/09844684
; Patent No. US20020142358A1
; GENERAL INFORMATION:
; APPLICANT: GEMINI SCIENCE, INC.
; APPLICANT: LA JOLLA INSTITUTE FOR ALLERGY AND IMMUNOLOGY
; TITLE OF INVENTION: HUMAN ANTI-CD40 ANTIBODIES AND METHODS OF MAKING SAME
; FILE REFERENCE: 21286/0276339
; CURRENT APPLICATION NUMBER: US/09/844,684
; CURRENT FILING DATE: 2001-04-27
; PRIOR APPLICATION NUMBER: US 60/200,601
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
; LENGTH: 716
; TYPE: DNA
; ORGANISM: Homo sapiens

US-09-844-684-13

Query Match 86.3%; Score 362.6; DB 9; Length 716;
Best Local Similarity 92.9%; Pred. No. 6.8e-106;
Matches 380; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG	71
Db	52	CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCTGCTGCTCTGGTCCCAGGTTCCAGATG	111
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC	131
Db	112	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGCAGGAGACAGAGTCAC	171
Qy	132	CATCACTTGTGGCGAGTCAGGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	172	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAACAGAAC	231
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	232	AGGGAAAGCCCCTAACGCTCCTGATCTATGCTGGATCCAGTTGCAAAGTGGGTCCCATC	291
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACCTCACCATCAGCAGCCTGCAGCC	311

Db	232	AGGGAAAGCCCTAAGCTCCTGATCTATGCTGGATCCAGTTGCAAAGTGGGTCCCATC	291
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	292	AAGGTTCAGCGGAGTGGATTGGACAGATTCACTCTCACCATCGGCAGCCTGCAGCC	351
Qy	312	TGAAGAGTTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCGTACACTTTGGTCA	371
Db	352	TGAAGAGTTTGCAACTTACTATTGTCAACAGGCTAGCAGTTCCCTCGGACGTTCGGCCA	411
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	412	AGGGACCAAGGTGGAGATCAAACGTACGGTGGCTGCACCATCTGTCTTC	460

RESULT 8

US-10-292-088-23

; Sequence 23, Application US/10292088
; Publication No. US20030211100A1
; GENERAL INFORMATION:
; APPLICANT: BEDIAN, VAHE
; APPLICANT: GLADUE, RONALD P.
; APPLICANT: CORVALAN, JOSE
; APPLICANT: JIA, XIAO-CHI
; APPLICANT: FENG, XIAO
; TITLE OF INVENTION: ANTIBODIES TO CD40
; FILE REFERENCE: ABX-PF/3 US
; CURRENT APPLICATION NUMBER: US/10/292,088
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 60/348,980
; PRIOR FILING DATE: 2001-11-09
; NUMBER OF SEQ ID NOS: 147
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 23
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Homo sapiens

US-10-292-088-23

Query Match 86.1%; Score 361.6; DB 15; Length 705;
Best Local Similarity 92.9%; Pred. No. 1.4e-105;
Matches 379; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy	13	ATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTCTGGTCCCAGGTTCCAGATGC	72
Db	1	ATGAGGCTCCCTGCTCAGCTCCTGGGCTCTGCTCTGGTCCCAGGTTCCAGATGC	60
Qy	73	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCACC	132
Db	61	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCACC	120
Qy	133	ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACCA	192
Db	121	ATCACTTGTGGCGAGTCAGCCTATTAGCAGCTGGTAGCCTGGTATCAGCAGAACCA	180
Qy	193	GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCA	252

Db	181	GGGAAAGCCCTAAACTCCTGATTATTCTGCCTCCGGTTGCAAAGTGGGTCCCATCA	240
Qy	253	ACGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT	312
Db	241	ACGTTCAGCGGCAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT	300
Qy	313	GAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCGTACACTTTGGTCAG	372
Db	301	GAAGATTTGCAACTTACTATTGTCAACAGACTGACAGTTCCCGCTCACTTCGGCGGC	360
Qy	373	GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	361	GGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	408

RESULT 9

US-10-292-088-47

; Sequence 47, Application US/10292088
; Publication No. US20030211100A1
; GENERAL INFORMATION:
; APPLICANT: BEDIAN, VAHE
; APPLICANT: GLADUE, RONALD P.
; APPLICANT: CORVALAN, JOSE
; APPLICANT: JIA, XIAO-CHI
; APPLICANT: FENG, XIAO
; TITLE OF INVENTION: ANTIBODIES TO CD40
; FILE REFERENCE: ABX-PF/3 US
; CURRENT APPLICATION NUMBER: US/10/292,088
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: 60/348,980
; PRIOR FILING DATE: 2001-11-09
; NUMBER OF SEQ ID NOS: 147
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 47
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Homo sapiens

US-10-292-088-47

Query Match 86.1%; Score 361.6; DB 15; Length 705;
Best Local Similarity 92.9%; Pred. No. 1.4e-105;
Matches 379; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy	13	ATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAGATGC	72
Db	1	ATGAGGCTCCCTGCTCAGCTCCTGGGCTCTGCTGCTCTGGTCCAGGTTCCAGATGC	60
Qy	73	GACATCCAGATGACCCAGTCTCCATCTCCGTGTCGATCTGTAGGAGACAGAGTCACC	132
Db	61	GACATCCAGATGACCCAGTCTCCATCTCCGTGTCGATCTGTAGGAGACAGAGTCACC	120
Qy	133	ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACCA	192
Db	121	ATCACTTGTGGCGAGTCAGGGTATTTACAGCTGGTAGCCTGGTATCAGCAGAACCA	180
Qy	193	GGTAAAGCACCTAACGCTCCTGATCTGTCATCCAGTTGCAAAGTGGTCCCATCA	252

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Db      181 GGGAAAGCCCCCTAACCTCCTGATCTACTGCATCCACTTACAAAGTGGGGTCCCATCA 240
Qy      253 AGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT 312
Db      241 AGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAACCT 300
Qy      313 GAAGATTTCGAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTAACATTTCGGCTACACTTTGGTCAG 372
Db      301 GAAGATTTCGAACTTACTATTGTCAACAGGCTAACATTTCGGCTACATTTCGGCGGA 360
Qy      373 GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db      361 GGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 408

```

RESULT 10

US-10-684-109-83

; Sequence 83, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 83

; LENGTH: 752

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-83

Query Match 86.1%; Score 361.6; DB 17; Length 752;
 Best Local Similarity 92.9%; Pred. No. 1.4e-105;
 Matches 379; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy 13 ATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTCTGGTCCCAGGTTCCAGATGC 72
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 1 ATGAGGGTCCCCGCTCAGCTCCTGGGCTCTGCTCTGGTCCCAGGTTCCAGATGC 60
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 73 GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCGATCTGTAGGAGACAGAGTCACC 132
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 61 GACATCCAGATGACCAATCTCCATCTTCCGTGTCGATCTAGGAGACAGAGTCACC 120
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy 133 ATCACTTGTGGGGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA 192
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 121 ATCACTTGTGGGGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAACCA 180
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Qy	193	GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCA	252
Db	181	GGGAAAGCCCCCTACGCTCCTATCTATGCTGCATCCACCTTGCAACGTGGGTCCCATCA	240
Qy	253	AGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT	312
Db	241	AGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCT	300
Qy	313	GAAGATTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCAG	372
Db	301	GAAGATTGCAACTTACTTTGTCAACAGGCTAACAGTTCCATTCACTTCGGCCCT	360
Qy	373	GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	361	GGGACCAAAGTGGATATCAAACGAACGTGGCTGCACCATCTGTCTTC	408

RESULT 11

US-10-684-109-84/c

; Sequence 84, Application US/10684109

; Publication No. US20040175379A1

; GENERAL INFORMATION:

; APPLICANT: DeVries, Peter J.

; APPLICANT: Green, Larry L.

; APPLICANT: Ostrow, David H.

; APPLICANT: Reilly, Edward B.

; APPLICANT: Wieler, James

; TITLE OF INVENTION: Erythropoietin Receptor Binding

; TITLE OF INVENTION: Antibodies

; FILE REFERENCE: 6989.US.02

; CURRENT APPLICATION NUMBER: US/10/684,109

; CURRENT FILING DATE: 2003-10-10

; PRIOR APPLICATION NUMBER: 10/269,711

; PRIOR FILING DATE: 2002-10-14

; NUMBER OF SEQ ID NOS: 115

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 84

; LENGTH: 752

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-684-109-84

Query Match 86.1%; Score 361.6; DB 17; Length 752;
 Best Local Similarity 92.9%; Pred. No. 1.4e-105;
 Matches 379; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

Qy	13	ATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATGC	72

Db	752	ATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATGC	693
----	-----	---	-----

Qy	73	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCACC	132

Db	692	GACATCCAGATGACCAATCTCCATCTTCCGTGTGCATCTAGGAGACAGAGTCACC	633
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Qy	133	ATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCA	192

Db	632	ATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAACCA	573
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Qy	193	GGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCA	252
Db	572	GGGAAAGCCCCTACGCTCCTATCTATGCTGCATCCACTTGCAACGTGGGTCCCATCA	513
Qy	253	AGGTTCAGCGGAAGTGGATCTGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCCT	312
Db	512	AGGTTCAGCGGCAGTGGATCTGGACAGATTCACACTCTCACCATCAGCAGCCTGCAGCCT	453
Qy	313	GAAGATTTGCAACTTACTATTGTCAACAGGCTAATAGTTCCGTACACTTTGGTCAG	372
Db	452	GAAGATTTGCAACTTACTTTGTCAACAGGCTAACAGTTCCCATTCACTTCGGCCCT	393
Qy	373	GGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	392	GGGACCAAAGTGGATATCAAACGAACGTGGCTGCACCATCTGTCTTC	345

RESULT 12

US-10-395-894-24

; Sequence 24, Application US/10395894
; Publication No. US20040033229A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, No. US20040033229Albert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US
; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 24
; LENGTH: 463
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Includes BamHI/BglII cloning junction, signal peptide, v region, portion
; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction
US-10-395-894-24

Query Match 82.5%; Score 346.4; DB 16; Length 463;
Best Local Similarity 90.0%; Pred. No. 9.5e-101;
Matches 371; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

Qy	9	CACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAG	68
Db	7	CACCATGAGGGTCCCTGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCCAGGTGCCAG	66
Qy	69	ATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGT	128
Db	67	ATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGT	126
Qy	129	CACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAA	188
Db	127	CACCATCACTTGTGGCGAGTCAGGCATTAGCCATTATTAGCCTGGTTCAAGCAGAA	186
Qy	189	ACCAGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCC	248
Db	187	ACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCC	246
Qy	249	ATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCA	308
Db	247	ATCAAAGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTACA	306
Qy	309	GCCTGAAGATTTGCAACTTACTATTGTCACACAGGCTAACAGTACACTTTCCCGTACACTTTGG	368
Db	307	GCCTGAAGATTTGCAACTTACTATTGCAACAGTATAATAGTTCCCGTCACTTCGG	366
Qy	369	TCAGGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	367	CGGAGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	418

RESULT 13

US-10-695-667-24

; Sequence 24, Application US/10695667
; Publication No. US20040161776A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, Norbert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangsue
; TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF
; FILE REFERENCE: P0741.70006US00
; CURRENT APPLICATION NUMBER: US/10/695,667
; CURRENT FILING DATE: 2003-10-27
; PRIOR APPLICATION NUMBER: US 10/395,894
; PRIOR FILING DATE: 2003-03-21
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 24
; LENGTH: 463
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Includes BamHI/BglIII cloning junction, signal peptide, V
region, portion
; OTHER INFORMATION: of C region and 3'XbaI/NheI (heavy) or NheI (light)
cloning junction
US-10-695-667-24

Query Match 82.5%; Score 346.4; DB 17; Length 463;
Best Local Similarity 90.0%; Pred. No. 9.5e-101;
Matches 371; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

Qy 9 CACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAG 68
Db 7 CACCATGAGGGTCCCTGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCAGGTTCCAG 66

Qy 69 ATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGT 128
Db 67 ATGTGACATCCAGATGACCCAGTCTCCATCCTACTGTCTGCATCTGTAGGAGACAGAGT 126

Qy 129 CACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAA 188
Db 127 CACCATCACTTGTGGCGAGTCAGGGCATTAGCCATTATTAGCCTGGTTAGCAGCAGAA 186

Qy 189 ACCAGGTAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC 248
Db 187 ACCAGGGAAAGCCCCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC 246

Qy 249 ATCAAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCA 308
Db 247 ATCAAAGTTCAGCGGCAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTACA 306

Qy 309 GCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGG 368
Db 307 GCCTGAAGATTTGCAACTTATTACTGCCAACAGTATAATAGTTCCCGTCACTTCGG 366

Qy 369 TCAGGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 420
Db 367 CGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTC 418

RESULT 14

US-10-395-894-10

; Sequence 10, Application US/10395894
; Publication No. US20040033229A1
; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHsLKE, No. US20040033229A1bert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA ANTIBODIES AND PROTEIN MULTIMERS
; FILE REFERENCE: P00741.70005.US

; CURRENT APPLICATION NUMBER: US/10/395,894
; CURRENT FILING DATE: 2003-03-24
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid
US-10-395-894-10

Query Match 82.5%; Score 346.4; DB 16; Length 6082;
Best Local Similarity 90.0%; Pred. No. 2e-100;
Matches 371; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

Qy 9 CACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTCTGGTCCAGGTTCCAG 68
Db 913 CACCATGAGGGTCCCTGCTCAGCTCCTGGGCTCCTGCTCTGTTCCAGGTGCCAG 972

Qy 69 ATGCGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGT 128
Db 973 ATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGT 1032

Qy 129 CACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAA 188
Db 1033 CACCATCACTTGTGGCGAGTCAGGGCATTAGCCATTATTTAGCCTGGTTCAAGCAGAA 1092

Qy 189 ACCAGGTAAGCACCTAACGCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC 248
Db 1093 ACCAGGGAAAGCCCTAACGCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC 1152

Qy 249 ATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCA 308
Db 1153 ATCAAAGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTACA 1212

Qy 309 GCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGG 368
Db 1213 GCCTGAAGATTTGCAACTTATTACTGCCAACAGTATAATAGTTCCGCTCACTTCGG 1272

Qy 369 TCAGGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 1273 CGGAGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 1324

RESULT 15

US-10-695-667-10

; Sequence 10, Application US/10695667

; Publication No. US20040161776A1

; GENERAL INFORMATION:
; APPLICANT: MADDON, Paul J.
; APPLICANT: DONOVAN, Gerald P.
; APPLICANT: OLSON, William C.
; APPLICANT: SCHSLKE, Norbert
; APPLICANT: GARDNER, Jason
; APPLICANT: MA, Dangshe
; TITLE OF INVENTION: PSMA FORMULATIONS AND USES THEREOF
; FILE REFERENCE: P0741.70006US00
; CURRENT APPLICATION NUMBER: US/10/695,667
; CURRENT FILING DATE: 2003-10-27
; PRIOR APPLICATION NUMBER: US 10/395,894
; PRIOR FILING DATE: 2003-03-21
; PRIOR APPLICATION NUMBER: PCT/US02/33944
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 60/335,215
; PRIOR FILING DATE: 2001-10-23
; PRIOR APPLICATION NUMBER: US 60/362,747
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/412,618
; PRIOR FILING DATE: 2002-09-20
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 10
; LENGTH: 6082
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Plasmid

US-10-695-667-10

Query Match 82.5%; Score 346.4; DB 17; Length 6082;
Best Local Similarity 90.0%; Pred. No. 2e-100;
Matches 371; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

Qy	9	CACCATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCAGGTTCCAG	68
Db	913	CACCATGAGGGTCCTGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTTCCAGGTTCCAG	972
Qy	69	ATGGCACATCCAGATGACCCAGTCTCCATCTCCGTGCTGCATCTGTAGGAGACAGAGT	128
Db	973	ATGTGACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGT	1032
Qy	129	CACCATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAA	188
Db	1033	CACCATCACTTGTGGCGAGTCAGGGCATTAGCCTATTAGCCTGGTATCAGCAGAA	1092
Qy	189	ACCAGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC	248
Db	1093	ACCAGGGAAAGCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCC	1152
Qy	249	ATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCA	308
Db	1153	ATCAAAGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTACA	1212
Qy	309	GCCTGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGG	368

Search completed: December 3, 2004, 02:43:24
Job time : 323.011 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 2, 2004, 12:19:03 ; Search time 2186.2 Seconds
(without alignments)
7000.593 Million cell updates/sec

Title: US-08-728-463B-220

Perfect score: 420

Sequence: 1 AAGCTTGCCACCATGATGGT TGGCTGCACCATCTGTCTTC 420

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 32822875 seqs, 18219865908 residues

Total number of hits satisfying chosen parameters: 65645750

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: gb_est2:*
3: gb_htc:*
4: gb_est3:*
5: gb_est4:*
6: gb_est5:*
7: gb_est6:*
8: gb_gss1:*
9: qb_qss2:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

8

Result	Query					Description
No.	Score	Match	Length	DB	ID	

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4	370.6	88.2	755	4	BG533970	BG533970	602553071
5	369	87.9	472	6	CD702614	CD702614	EST19139
6	364.2	86.7	497	6	CD696718	CD696718	EST13241
7	364.2	86.7	558	6	CD690030	CD690030	EST6553 h
8	364.2	86.7	605	6	CD688415	CD688415	EST4937 h
9	363.4	86.5	851	4	BG686018	BG686018	602638582
10	363.4	86.5	894	4	BG341803	BG341803	602463535
11	359.4	85.6	912	2	BF129120	BF129120	601811580
12	356.2	84.8	510	6	CD694557	CD694557	EST11080
13	353.8	84.2	818	3	CR597684	CR597684	full-leng
14	353	84.0	484	6	CD696042	CD696042	EST12565
15	352.8	84.0	903	5	BQ706785	BQ706785	AGENCOURT
16	350.4	83.4	1112	4	BM924778	BM924778	AGENCOURT
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18	349.8	83.3	487	2	AW405988	AW405988	UI-HF-BL0
19	349.8	83.3	611	6	CD702728	CD702728	EST19253
20	349.8	83.3	724	4	BI837410	BI837410	603086702
21	349.8	83.3	759	6	CB984469	CB984469	AGENCOURT
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23	349	83.1	906	4	BG756264	BG756264	602713576
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25	348	82.9	710	6	CD695065	CD695065	EST11588
26	346.6	82.5	545	6	CD697196	CD697196	EST13719
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34	343.4	81.8	741	6	CB958688	CB958688	AGENCOURT
35	341.8	81.4	504	6	CD696759	CD696759	EST13282
36	341.8	81.4	610	6	CD691065	CD691065	EST7588 h
37	341.8	81.4	631	5	BX646383	BX646383	DKFZp781G
38	341.8	81.4	677	6	CD692170	CD692170	EST8709 h
39	340.4	81.0	726	6	CB986484	CB986484	AGENCOURT
40	340.2	81.0	624	6	CD690145	CD690145	EST6668 h
41	340.2	81.0	805	6	CB955618	CB955618	AGENCOURT
42	339.4	80.8	1038	4	BG757218	BG757218	602710591
43	338.6	80.6	447	2	AW405752	AW405752	UI-HF-BL0
44	338.6	80.6	574	6	CD710508	CD710508	EST27035
45	338.6	80.6	770	6	CB987520	CB987520	AGENCOURT

ALIGNMENTS

RESULT 1
BF976230
LOCUS BF976230 943 bp mRNA linear EST 22-JAN-2001
DEFINITION 602245105F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4336225 5',
mRNA sequence.
ACCESSION BF976230

VERSION BF976230.1 GI:12343445
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 943)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1208 row: j column: 02
 High quality sequence stop: 721.
 FEATURES Location/Qualifiers
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 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4336225"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the
 following 5' adaptor: GGCACGAG(G). Size-selected >500bp
 for average insert size 1.8kb. Library constructed by Ling
 Hong in the laboratory of Gerald M. Rubin (University of
 California, Berkeley) using ZAP-cDNA synthesis kit
 (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."

ORIGIN

Query Match 91.7%; Score 385; DB 2; Length 943;
 Best Local Similarity 96.3%; Pred. No. 2.9e-109;
 Matches 394; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCGCTCTGGTCCAGGTTCCAGATG 71
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 Db 23 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCAGGTTCCAGATG 82

 Qy 72 CGACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
 ||||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 83 CGACATCCAGATGACCCAGTCTCCATCTCCGTCTGCATCTGTAGGAGACAGAGTCAC 142

 Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC 191
 ||||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 143 CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC 202

Qy	192	AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	203	AGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	262
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	263	AAGGTTCAGCGGAGTGGATCTGGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	322
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCTGACACTTTGGTCA	371
Db	323	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCTCACACTTTGGCCA	382
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATGTCTTC	420
Db	383	GGGGACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATGTCTTC	431

RESULT 2

BF663472

LOCUS BF663472 1100 bp mRNA linear EST 21-DEC-2000

DEFINITION 602144635F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4297736 5', mRNA sequence.

ACCESSION BF663472

VERSION BF663472.1 GI:11937367

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1100)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1152 row: f column: 09
 High quality sequence stop: 704.

FEATURES Location/Qualifiers

source 1..1100
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4297736"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp

for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH MGC Library."

ORIGIN

Query Match 89.0%; Score 373.8; DB 2; Length 1100;
Best Local Similarity 94.6%; Pred. No. 1e-105;
Matches 387; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG 71
Db 13 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG 72
Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
Db 73 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 132
Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
Db 133 CATCACTTGTGGCGAGTCAGGATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAC 192
Qy 192 AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
Db 193 AGGGAAAGCCCCTAACGCTCCTGATCTATGCTTCATCCAGTTGCAAAGTGGGTCCCATC 252
Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 253 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 312
Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCCGTACACTTTGGTCA 371
Db 313 TGAAGATTTGCAACTTACTATTGTCAACAGGGCTAACAGTTCCCTCTCACTTCGGCGG 372
Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCACATGTCTTC 420
Db 373 AGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCACATGTCTTC 421

RESULT 3

CD690290

LOCUS CD690290 606 bp mRNA linear EST 25-JUN-2003
DEFINITION EST6813 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION CD690290
VERSION CD690290.1 GI:32210896
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 606)
AUTHORS Liu, X.-Q., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and
Zeng, Y.-X.
TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
JOURNAL Unpublished (2003)
COMMENT Contact: YiXin Zeng

Cancer Center
Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers
source 1. .606
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx cDNA library from southern Chinese"

ORIGIN

Query Match 88.6%; Score 372.2; DB 6; Length 606;
Best Local Similarity 94.4%; Pred. No. 2.6e-105;
Matches 386; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCAGGTTCCAGATG	71
Db	73	CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG	132
Qy	72	CGACATCCAGATGACCCAGTCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	131
Db	133	CGACATCCAGATGACCCAGTCAGTCTCCATCTTCTGTCTGCATCTGTAGGAGACAGAGTCAC	192
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	193	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC	252
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	253	AGGGAAAGCCCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC	312
Qy	252	AAGGTTAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	313	AAGGTTAGCGGAAGTGGATCTGGACAGATTCACTCTCACATCAGCAGCCTGCAGCC	372
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	373	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGCCACTTCGGCGG	432
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	433	AGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	481

RESULT 4

BG533970

LOCUS BG533970 755 bp mRNA linear EST 03-APR-2001
DEFINITION 602553071F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4663096 5',
mRNA sequence.

ACCESSION BG533970

VERSION BG533970.1 GI:13525510

KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 755)
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLCM1464 row: m column: 17
High quality sequence stop: 726.
FEATURES Location/Qualifiers
source 1. .755
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4663096"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_77"
/note="Organ: lung; Vector: pDNR-LIB (Clontech); Site_1:
SfiI (ggccgcctcgcc); Site_2: SfiI (ggccattatggcc); 5' and
3' adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.9
kb (range 0.5-4.0 kb). 12/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 88.2%; Score 370.6; DB 4; Length 755;
Best Local Similarity 94.1%; Pred. No. 9e-105;
Matches 385; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAGATG 71
||| ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 33 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCTGCTGCTCTGGTCCAGGTTCCAGATG 92

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC 131
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 93 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACGGAGTCAC 152

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC 191
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 153 CATCACTTGTGGCGAGTCAGGATTCAGCAGCTGGTTAGCCTGGTATCAGCAGAAAGC 212

Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251

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Db 213 AGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATC 272
Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 311
Db 273 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC 332
Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGGTCA 371
Db 333 TGAAGATTTGCAACTTACTATTGTCAACAGGGTAACAGTTCCCTTCACTTCGGCGG 392
Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
Db 393 AGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 441

```

RESULT 5

CD702614

LOCUS CD702614 472 bp mRNA linear EST 25-JUN-2003
 DEFINITION EST19139 human nasopharynx Homo sapiens cDNA, mRNA sequence.
 ACCESSION CD702614
 VERSION CD702614.1 GI:32233244
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 472)
 AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.
 TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
 JOURNAL Unpublished (2003)
 COMMENT Contact: YiXin Zeng
 Cancer Center
 Sun Yat-sen University
 651 DongFeng Road East, GuangZhou 510060, China
 Tel: 86-1380-9770-743
 Fax: 86-20-8775-4506
 Email: yxzeng@gzsums.edu.cn.
 FEATURES Location/Qualifiers
 source 1..472
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA
 library from southern Chinese"

ORIGIN

Query Match 87.9%; Score 369; DB 6; Length 472;
 Best Local Similarity 93.9%; Pred. No. 2.5e-104;
 Matches 384; Conservative 0; Mismatches 25; Indels 0; Gaps 0;
 Qy 12 CATGATGGTCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATG 71
 Db 57 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTCTGGTCCAGGTTCCAGATG 116

Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC	131
Db	117	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTGCATCTGTAGGAGACAGAGTCAC	176
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC	191
Db	177	CATCACTTGTGGCGAGTCAGGCTATTAGCACCTGGTTAGCCTGGTATCAGCAGAAACC	236
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	237	AGGGAAAGCCCTAACGCTCCTGATCTACTGCATCCAGTTGCAAAGTGGGTCCCATC	296
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCACTCAGCAGCCTGCAGCC	311
Db	297	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	356
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	357	TGAAGATTTGCAACTTACTATGGTCAACAGGCTAACAGTTCCCTCTCACTTCGGCGG	416
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCCTGTCTTC	420
Db	417	AGGGACCAAGTGGAGATCAAACGAACGTGGCTGCACCCTGTCTTC	465

RESULT 6
 CD696718

LOCUS CD696718 497 bp mRNA linear EST 25-JUN-2003
 DEFINITION EST13241 human nasopharynx Homo sapiens cDNA, mRNA sequence.
 ACCESSION CD696718
 VERSION CD696718.1 GI:32223477
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 497)
 AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.
 TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
 JOURNAL Unpublished (2003)
 COMMENT Contact: YiXin Zeng
 Cancer Center
 Sun Yat-sen University
 651 DongFeng Road East, GuangZhou 510060, China
 Tel: 86-1380-9770-743
 Fax: 86-20-8775-4506
 Email: yxzeng@gzsums.edu.cn.
 FEATURES Location/Qualifiers
 source 1. 497
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA

library from southern Chinese."

ORIGIN

RESULT 7

CD690030
LOCUS CD690030 558 bp mRNA linear EST 25-JUN-2003
DEFINITION EST6553 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION CD690030
VERSION CD690030.1 GI:32210387
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 558)
AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
Zeng,Y.-X.
TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
JOURNAL Unpublished (2003)
COMMENT Contact: YiXin Zeng
Cancer Center
Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-1380-9770-743

Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers
source 1..558
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx cDNA library from southern Chinese"

ORIGIN

Query Match 86.7%; Score 364.2; DB 6; Length 558;
Best Local Similarity 93.2%; Pred. No. 8.4e-103;
Matches 381; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG	71
Db	55	CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCCTGCTGCTCTGGTTCCCAGGTTCCAGATG	114
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC	131
Db	115	CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC	174
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	175	CATCACTTGTGGCGAGTCAGGATTAGCACCTGGTTAGCCTGGTATCAGCAGAAC	234
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC	251
Db	235	AGGGAAAGCCCCCTAAACTCCTGATCTATGCTGCATCCAATTGCTAAGTGGGTCCCATC	294
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	295	AAGATTCAAGCGGAGTGGATCTGGACAGATTCACTCTCACCATCAACAGCCTGCAGCC	354
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGGTCA	371
Db	355	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCTGGACAGTTGGCCA	414
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	415	AGGGACCAAGGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC	463

RESULT 8

CD688415

LOCUS CD688415 605 bp mRNA linear EST 25-JUN-2003
DEFINITION EST4937 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION CD688415
VERSION CD688415.1 GI:32207195
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 605)
 AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and Zeng,Y.-X.
 TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
 JOURNAL Unpublished (2003)
 COMMENT Contact: YiXin Zeng
 Cancer Center
 Sun Yat-sen University
 651 DongFeng Road East, GuangZhou 510060, China
 Tel: 86-1380-9770-743
 Fax: 86-20-8775-4506
 Email: yxzeng@gzsums.edu.cn.
 FEATURES Location/Qualifiers
 source 1. .605
 /organism="Homo sapiens"
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 /db_xref="taxon:9606"
 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA library from southern Chinese"

ORIGIN

Query Match 86.7%; Score 364.2; DB 6; Length 605;
 Best Local Similarity 93.2%; Pred. No. 8.6e-103;
 Matches 381; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTCTGGTCCAGGTTCCAGATG	71
Db	52	CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCAGGTTCCAGATG	111
Qy	72	CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC	131
Db	112	CGACATCCACATGACCCAGTCTCCATCTTCTGTCTGCATCTGTGGAGACAGAGTCAC	171
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	172	CATCACTTGTGGCGAGTCAGGGTATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAC	231
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCCAC	251
Db	232	AGGGAAAGCCCCCTAAACTCCTGATCTACTGCATCCAGTTGCAAAGTGGGTCCCAC	291
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	292	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACATCAGCAGCCTGCAGCC	351
Qy	312	TGAAGATTTCGAACCTTACTATTGTCAACAGGCTAATAGTTCCGTACACTTTGGTCA	371
Db	352	TGAAGATTTCGAACCTTACTATTGTCAACAGACTAACAGTTCCGCTCACTTCGGCGG	411
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACTGTGGCTGCACCCTGTCTTC	420
Db	412	AGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCCTGTCTTC	460

BG686018

LOCUS BG686018 851 bp mRNA linear EST 01-MAY-2001

DEFINITION 602638582F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4766157 5', mRNA sequence.

ACCESSION BG686018

VERSION BG686018.1 GI:13917415

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 851)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1626 row: c column: 22
 High quality sequence stop: 851.

FEATURES Location/Qualifiers

source 1..851
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4766157"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."

ORIGIN

Query Match 86.5%; Score 363.4; DB 4; Length 851;
 Best Local Similarity 94.6%; Pred. No. 1.7e-102;
 Matches 387; Conservative 0; Mismatches 21; Indels 1; Gaps 1;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 71
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 13 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 72

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 131
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 73 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 132

Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	133	CATCACTTGTGGCGAGTCAGGCTATTAGCAGCTGGTAGCCTGGTATCAGCAGAAACC	192
Qy	192	AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTCCCATC	251
Db	193	AGG-AAAGCCCCTAACGCTCCTGATCTATGCTTCATCCAGTTGCAAAGTGGGTCCCATC	251
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	252	AAGGTTCAGCGGCAGTGGATCTGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCTCTCACTTCGGCGG	371
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	372	AGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420

RESULT 10

BG341803

LOCUS BG341803 894 bp mRNA linear EST 27-FEB-2001
 DEFINITION 602463535F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4576136 5',
 mRNA sequence.
 ACCESSION BG341803
 VERSION BG341803.1 GI:13148241
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 894)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM1288 row: f column: 09
 High quality sequence stop: 636.
 FEATURES Location/Qualifiers
 source 1..894
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4576136"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"

/clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the
 following 5' adaptor: GGCACGAG(G). Size-selected >500bp
 for average insert size 1.8kb. Library constructed by Ling
 Hong in the laboratory of Gerald M. Rubin (University of
 California, Berkeley) using ZAP-cDNA synthesis kit
 (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."

ORIGIN

Query Match 86.5%; Score 363.4; DB 4; Length 894;
 Best Local Similarity 94.6%; Pred. No. 1.7e-102;
 Matches 387; Conservative 0; Mismatches 21; Indels 1; Gaps 1;

Qy	12	CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCCTGCTCTGGTCCCAGGTTCCAGATG	71
Db	18	CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCCAGGTTCCAGATG	77
Qy	72	CGACATCCAGATGACCCAGTCTCCATTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC	131
Db	78	CGACATCCAGATGACCCAGTCTCCATTTCCGTGCTGCATCTGTAGGAGACAGAGTCAC	137
Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAAC	191
Db	138	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAAC	197
Qy	192	AGGTAAAGCACCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCAC	251
Db	198	AGG-AAAGCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCAC	256
Qy	252	AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	257	AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCC	316
Qy	312	TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTCACAGTTCCCATTCACTTCGGCCC	371
Db	317	TGAAGATTTGCAACTTACTATTGTCAACAGGCTCACAGTTCCCATTCACTTCGGCCC	376
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	377	TGGGACCAAGTGGATATCAAACGAACGTGGCTGCACCATCTGTCTTC	425

RESULT 11

BF129120

LOCUS BF129120 912 bp mRNA linear EST 24-OCT-2000
 DEFINITION 601811580F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4054530 5',
 mRNA sequence.
 ACCESSION BF129120
 VERSION BF129120.1 GI:10968160
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 912)
 AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
 cDNA Library Preparation: Ling Hong/Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM894 row: p column: 19
 High quality sequence stop: 695.
 FEATURES Location/Qualifiers
 source 1. .912
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:4054530"
 /tissue_type="primary B-cells from tonsils (cell line)"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_48"
 /note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
 Site_2: EcoRI; cDNA made by oligo-dT priming.
 Directionally cloned into EcoRI/XhoI sites using the
 following 5' adaptor: GGCACGAG(G). Size-selected >500bp
 for average insert size 1.8kb. Library constructed by Ling
 Hong in the laboratory of Gerald M. Rubin (University of
 California, Berkeley) using ZAP-cDNA synthesis kit
 (Stratagene) and Superscript II RT (Life Technologies).
 Note: this is a NIH_MGC Library."
 ORIGIN

Query Match 85.6%; Score 359.4; DB 2; Length 912;
 Best Local Similarity 92.4%; Pred. No. 3.1e-101;
 Matches 378; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATG 71
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 4 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCAGGTTCTAGATG 63

 Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCTGTAGGAGACAGAGTCAC 131
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 64 CGACATCCAGATGACCCAGTCTCCATCTTCCGTCTGCATCCGTAGGAGACAGAGTCAC 123

 Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACC 191
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 124 CATCACTTGTGGCGAGTCAGGATATTAGTAGTTGGTTAGCCTGGTATCAGCAGAAACC 183

 Qy 192 AGGTAAAGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCATC 251
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 184 AGGGAAAGCCCTAAACTCCTGATCTATGCTGCATCCAGTTACAAAGTGGGTCCATC 243

 Qy 252 AAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCACAGCAGCCTGCAGCC 311
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 244 AAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTACAGCC 303
 Qy 312 TGAAGAGTTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGTTCCGTACACTTTGGTCA 371
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 304 TGAAGAGTTTGCAACTTACCAATTGTCTACAGACTAACAGTTCCATTCACTTCGGCCC 363
 Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 364 TGGGACCAAAAGTGATATCAAGCGAACGTGGCTGCACCATCTGTCTTC 412

RESULT 12

CD694557

LOCUS CD694557 510 bp mRNA linear EST 25-JUN-2003
 DEFINITION EST11080 human nasopharynx Homo sapiens cDNA, mRNA sequence.
 ACCESSION CD694557
 VERSION CD694557.1 GI:32219318
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 510)
 AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
 Zeng,Y.-X.
 TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
 JOURNAL Unpublished (2003)
 COMMENT Contact: YiXin Zeng
 Cancer Center
 Sun Yat-sen University
 651 DongFeng Road East, GuangZhou 510060, China
 Tel: 86-1380-9770-743
 Fax: 86-20-8775-4506
 Email: yxzeng@gzsums.edu.cn.
 FEATURES Location/Qualifiers
 source 1. .510
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /tissue_type="normal nasopharynx"
 /clone_lib="human nasopharynx"
 /note="ESTs generated from a normal nasopharynx cDNA
 library from southern Chinese"

ORIGIN

Query Match 84.8%; Score 356.2; DB 6; Length 510;
 Best Local Similarity 91.9%; Pred. No. 2.6e-100;
 Matches 376; Conservative 0; Mismatches 33; Indels 0; Gaps 0;
 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCCCAGGTTCCAGATG 71
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 66 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCCAGGTTCCAGATG 125
 Qy 72 CGACATCCAGATGACCCAGTCTCCATCTCCGTGCTGCATCTGTAGGAGACAGAGTCAC 131
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 126 CGACATCCAGATGACCCAGTCTCCATCTCCGTGCTGCTTCTGTGGGAGACAGCGTCAC 185

Qy	132	CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAACC	191
Db	186	CATCACTTGTGGCGAGTCAGGCTATTGGCAGCTGGTAGCCTGGTATCAGCAGAAACC	245
Qy	192	AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCATC	251
Db	246	AGGGAAAGCCCCCTAACGTTCTGATCTATGCTGCATCCATTGCAAAGTGGGTCCATC	305
Qy	252	AAGGTTCAAGCGGAAGTGGATCTGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGCC	311
Db	306	AAGGTTCAAGCGGCAGTGGATCTGGACAGCTTCACTCTCACCATCAGCAGCCTGCAGCC	365
Qy	312	TGAAGAGTTTGCAACTTACTATTGTCACACAGGCTAACAGTTCCGTACACTTTGGTCA	371
Db	366	TGAAGAGTTGGCAACTTACCAATTGTCACACAGGCTAACAGTTCCCTATCACCTTCGGCCA	425
Qy	372	GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC	420
Db	426	AGGGACACGACTGGAGATTAAACGAACGTGGCTGCACCATCTGTCTTC	474

RESULT 13

CR597684

LOCUS CR597684 818 bp mRNA linear HTC 21-JUL-2004

DEFINITION full-length cDNA clone CS0DI026YL22 of Placenta Cot 25-normalized of Homo sapiens (human).

ACCESSION CR597684

VERSION CR597684.1 GI:50478491

KEYWORDS HTC; CNSLT_cDNA.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 818)

AUTHORS Li,W.B., Gruber,C., Jesse,J. and Polayes,D.

TITLE Full-length cDNA libraries and normalization

JOURNAL Unpublished

REMARK Contact : Feng Liang Email : fliang@lifetech.com URL : <http://fulllength.invitrogen.com/> InVitroGen Corporation 1600 Faraday Avenue

REFERENCE 2 (bases 1 to 818)

AUTHORS Genoscope.

TITLE Direct Submission

JOURNAL Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)

COMMENT 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen.

FEATURES Location/Qualifiers

source 1. .818

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="CS0DI026YL22"

/tissue_type="Placenta Cot 25-normalized"
/plasmid="pCMVSPORT_6"

ORIGIN

Query Match 84.2%; Score 353.8; DB 3; Length 818;
Best Local Similarity 93.6%; Pred. No. 1.7e-99;
Matches 381; Conservative 0; Mismatches 22; Indels 4; Gaps 1;

Qy 18 GGTCCCAGCTCAGCTCCTCGGTCTCCTGCTCTGGTCCAGGTTCCAGATGCGACAT 77
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1 GGTCCCCGCTCAGCTCCTGGGCTCCTGCTCTGGTCCAGGTTCCAGATGCGACAT 60

Qy 78 CCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCACCATCAC 137
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 61 CCAGATGACCCAGTCTCCATCTTCCGTGCTGCATCTGTAGGAGACAGAGTCACCATCAC 120

Qy 138 TTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCATAAACCCAGGTAA 197
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 121 TTGTGGCGAGTCAGGATATTAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCAGGGAA 180

Qy 198 AGCACCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATCAAGGTT 257
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 181 AGCCCCTAACGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCCATCAAGGTT 240

Qy 258 CAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGA 317
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 241 CAGCGGCAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGA 300

Qy 318 TTTTGCAACTTACTATTGTCAACAGGCTAACAGGCTAACAGGCTAACACTCTCACTGTGGTGGACGTTGGCCAAG 373
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 301 TTTTGCAACTTACTATTGTCAACAGGCTAACACTCTCACTGTGGTGGACGTTGGCCAAG 360

Qy 374 GAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 361 GGACCAAGGTGGAAATCAAACGAACGTGGCTGCACCATCTGTCTTC 407

RESULT 14

CD696042

LOCUS CD696042 484 bp mRNA linear EST 25-JUN-2003
DEFINITION EST12565 human nasopharynx Homo sapiens cDNA, mRNA sequence.
ACCESSION CD696042
VERSION CD696042.1 GI:32222175
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 484)
AUTHORS Liu,X.-Q., Zhou,Y., Zhang,L.-J., Xu,H., Chen,H.-K., Pan,Z.-G. and
Zeng,Y.-X.
TITLE Transcriptional Gene Expression Profile of Human Nasopharynx
JOURNAL Unpublished (2003)
COMMENT Contact: Yixin Zeng
Cancer Center
Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China

Tel: 86-1380-9770-743
Fax: 86-20-8775-4506
Email: yxzeng@gzsums.edu.cn.

FEATURES Location/Qualifiers
source 1..484
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTs generated from a normal nasopharynx cDNA library from southern Chinese"

ORIGIN

Query Match 84.0%; Score 353; DB 6; Length 484;
Best Local Similarity 91.4%; Pred. No. 2.6e-99;
Matches 374; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCCTGCTGCTCTGGTCCAGGTTCCAGATG 71
||| ||| ||||| ||||| ||||| ||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db 58 CATGAGGGTCCCCGCTCAGCTCCTGGGCTCCTGCTGCTCTGGTCCAGGTTCCAGATG 117

Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCAC 131
||| ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 118 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACACAGTCAG 177

Qy 132 CATCACTTGTGGCGAGTCAGGATATTAGCAGCTGGTAGCCTGGTATCAGCATAAAC 191
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 178 CATCACTTGTGGCGAGTCAGGCTATTGGCAACTGGTAGCCTGGTATCAACAGAGACC 237

Qy 192 AGGTAAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCCATC 251
||| ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 238 AGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGCGTCCCTTC 297

Qy 252 AAGGTTCAAGCGGAAGTGGATCTGGACAGATTCACTCTCACCACAGCAGCCTGCAGCC 311
||| ||||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db 298 CAGGTTCAAGCGGAAGTGGATCTGGACAGATTCACTCTCACCACAGCAGCCTGCAGCC 357

Qy 312 TGAAGATTTGCAACTTACTATTGTCAACAGGCTAACAGTTCCCGTACACTTTGGTCA 371
||| ||||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db 358 GGAGGATTTGGAATTACTATTGTCAACAGGCTAACAGTGTCCCTTCACTTGGGCC 417

Qy 372 GGGAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCACAGTCTTC 420
||| ||||| ||||| ||||| ||||| ||||| |||||
Db 418 TGGGACCACAGTGGATATCAAACGAACGTGGCTGCACCACAGTCTTC 466

RESULT 15

BQ706785

LOCUS BQ706785 903 bp mRNA linear EST 16-JUL-2002
DEFINITION AGENCOURT_7977104 NIH_MGC_113 Homo sapiens cDNA clone IMAGE:6216052
5', mRNA sequence.
ACCESSION BQ706785
VERSION BQ706785.1 GI:21845684
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Dr. Mark Watson
 cDNA Library Preparation: Rubin Laboratory
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: LLCM2385 row: p column: 05
 High quality sequence stop: 697.
FEATURES
source Location/Qualifiers
 1. .903
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:6216052"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_113"
 /note="Organ: spleen; Vector: pOTB7; Site_1: XhoI; Site_2:
 EcoRI; cDNA made by oligo-dT priming. Directionally cloned
 into EcoRI/XhoI sites using the following 5' adaptor:
 GGCACGAG(G). Library constructed by Ling Hong in the
 laboratory of Gerald M. Rubin (University of California,
 Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
 Superscript II RT (Life Technologies). Note: this is a
 NIH_MGC Library."
ORIGIN
 Query Match 84.0%; Score 352.8; DB 5; Length 903;
 Best Local Similarity 92.7%; Pred. No. 3.7e-99;
 Matches 382; Conservative 0; Mismatches 27; Indels 3; Gaps 1;
 Qy 12 CATGATGGTCCCAGCTCAGCTCCTCGGTCTCTGCTCTGGTCCCAGGTTCCAGATG 71
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 4 CATGAGGGTCCCCGCTCAGCTCCTGGGGCTCTGCTCTGGTCCCAGGTTCCAGATG 63
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Qy 72 CGACATCCAGATGACCCAGTCTCCATCTTCCGTGTCATCTGTAGGAGACAGAGTCAC 131
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 64 CGACATCCAGATGACCCAGTCTCCATCTTCTGTGTCATCTGTAGGAGACAGAGTCAC 123
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Qy 132 CATCACTTGTGGCGAGTCAGGATATT---AGCAGCTGGTTAGCCTGGTATCAGCATAA 188
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 124 CATCACTTGTGGCGAGTCAGGGTATTAGCAGCAGCAGCTGGTTAGCCTGGTATCAGCAGAA 183
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Qy 189 ACCAGGTAAGCACCTAACGCTCTGATCTATGCTGCATCCAGTTGCAAAGTGGTGTCCC 248
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 184 ACCAGGGAAAGCCCCCTAAACTCCTGATCTATGCTGCATCCAGTTGCAAAGTGGGTCCC 243
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Qy 249 ATCAAGGTTCAGCGGAAGTGGATCTGGACAGATTCACTCTCACCATCAGCAGCCTGCA 308
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 244 ATCAAGGTTCAGCGGCAGTGGATCTGGACAGATTCACTCTCACTATCAGCAGCCTGCA 303
QY 309 GCCTGAAGAGTTTGCAACTTACTATTGTCAACAGGGCTAACAGTTTCCCCGTACACTTTGG 368
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 304 GCCTGAAGAGTTTGCAACTTACTTTGTCAACAGGGTTCACAGTTCCCTCAGACTTTGG 363
QY 369 TCAGGGAAACCAAGCTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 420
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 364 CGGAGGGACCAAGGTGGAGATCAAACGAACGTGGCTGCACCATCTGTCTTC 415

Search completed: December 2, 2004, 20:56:38

Job time : 2187.2 secs